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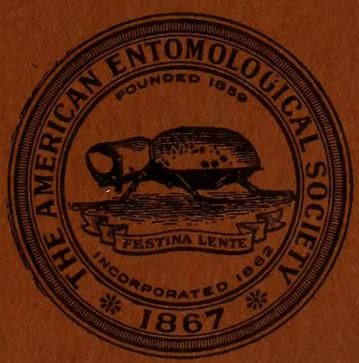
OF THE
SPHECOID WASPS
AND THEIR TYPE SPECIES
(HYMENOPTERA: ACULEATA)

BY

V. S. L. PATE



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AT THE ACADEMY OF NATURAL SCIENCES
PHILADELPHIA
1937

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THE GENERIC NAMES OF THE SPHECOID WASPS AND THEIR TYPE SPECIES

(HYMENOPTERA: ACULEATA)

BY V. S. L. PATE

Confusion in taxonomy often arises from a failure to recognize generic types. To anyone who has worked upon the taxonomy of the Sphecoid wasps this is at once apparent. Our knowledge of many of the groups of the Hymenoptera has been materially clarified and stabilized by the preparation and publication of lists of the generic and subgeneric names and their genotypes. It is hoped that this catalogue will perform a similar role for the Sphecoid wasps.

Many variations in the orthography of the names has been found. In the main these are misspellings which do not invalidate the originals, but merely encumber the literature, and are moreover as frequently the errors of printers as of authors. Still the papers of certain writers are so replete with errors of this type that it has been considered advisable to incorporate them in the following catalogue, either in their proper alphabetic sequence or in footnotes. A few, nevertheless, have been omitted, because they are such obvious typographical errors that their inclusion would needlessly lengthen this paper. That some errors and omissions have been made in spite of every effort to avoid them is almost inevitable. This is scarcely surprising in view of the vast amount of literature that has appeared since the time of Linnaeus. It is hoped, however, that all such will be called to my attention promptly in order that they may be taken care of in a supplement.

Whereas many of the genera of the other Hymenopterous complexes have lacked type designations prior to the publication of catalogues similar to this, most of the Sphecoids have already had types fixed. In fact, many names have been found to be encumbered with a plethora of fixations of which a number are contradictory or incorrect. The problem then is to determine what is the earliest valid fixation. For this it has been necessary to decide whether or not the designation of a species as type may be considered valid when the species selected was not originally included in the genus but has since proved to be a synonym of a species that was first included. The zoological code is unfortunately silent upon this point. Most authors have followed the practice of accepting such a designation as valid despite the fact that this is in a measure contrary to the provisions of Article 30. Of course, it all hinges upon the fact of whether the author who thus designated a species as type was aware it was a synonym at the time he selected it. In such an instance, the designation unquestionably may be considered valid. If, however, neither in the publication wherein he makes the selection nor in any previous work does the author give evidence he realizes this fact, then such a designation can scarcely be construed as being valid and in accordance with the rules of nomenclature as they now stand. The fact that an author has subsequently realized that the species he selected as genotype was a synonym of a species originally included, or that the contemporaries of an author who made such a designation were aware of this fact can have little bearing on the case, particularly if in the meantime another author selected a type in strict conformance with the rules of nomenclature.

In this catalogue the following form has been employed: first, the name of the genus or subgenus; second, the author and the year [1] in which it was proposed; third, the reference to the original description, supplemented in those cases where no species were originally included by an indication of the first reference in which species were included; fourth, the number of species originally included in the genus or subgenus, unless it was monobasic; fifth, the type species, followed by any pertinent synonymy in brackets;

[1] The dates given by Sherborn in his Index Animalium have been used in most cases for all names published prior to 1850.

sixth, a statement of the method whereby the type was fixed; and finally, an indication of any isogenotypic synonymy. In order to conserve space, I have given as a rule only the designation which I consider to be the earliest valid one, although in a few cases where the fixation may be construed as doubtful, I have added, usually in a footnote, the next valid designation or a brief discussion of the case. In the synonymic data placed in brackets immediately following the citation of the genotype, the first reference usually represents the form employed and the rank accorded the name by the author who proposed the genus or subgenus, whereas the final form represents in every case, unless otherwise indicated, what in the light of our present collective knowledge of the group, I consider the correct generic or subgeneric position of the type species of the respective genus.[2] It may be argued that such data have no place in a catalogue of this sort whose content should be primarily if not wholly information of a strictly nomenclatorial nature. However, during the past six or eight years I have had an opportunity to examine either the types of a great number of the genotypes or authentic material of them. The remaining information has been carefully compiled from the literature, but all such data have been subjected to the closest scrutiny and study. As a result, I have been able to allocate to what I consider their proper place practically all the names that have been proposed. It is but natural that my opinions on the generic synonymy of certain groups may not be in accord with the ideas of many others. A catalogue such as this inevitably raises as many problems as it tends to solve. Nevertheless, I have the temerity to believe that, in spite of occasional errors, the information presented in succinct form on the following pages may be of considerable use to the various workers in this field. My full views on the taxonomy of the various groups will be embodied in a series of forthcoming papers.

It gives me great pleasure to express my gratitude to the officials of the Academy of Natural Sciences of Philadelphia and the American Entomological Society who have graciously placed at my disposal the facilities of their unparalleled libraries. Drs. J. C.

[2] For the names pertaining to the Crabroninae, I have followed in most cases the rather cumbersome form employed by Kohl in his masterly work upon the Palaearctic Crabrones (1915, Ann. K. K. Naturhist. Hofmus., Wien, XXIX, pp. 1–453).

Bradley, W. T. M. Forbes and James A. G. Rehn have aided me considerably by expressing opinions upon a number of difficult nomenclatorial problems that have arisen during the course of this work. I assume sole responsibility, however, for any opinions expressed on the following pages.

In view of certain recent developments concerning the nomenclatorial status of the "Erlangen List" and the Table appended to Latreille's Considérations Générales of 1810, the Sphecoid names contained in these two works have been briefly discussed in appendices immediately following the catalogue.

All citations to literature are given in full in the body of the catalogue with the exception of two standard works. Wherever the following references occur, the publications indicated below are meant:

Latreille, 1810—LATREILLE, P. A. Considérations générales sur l'ordre naturel des animaux composant les classes des Crustacés, des Arachnides, et des Insectes; avec un Tableau Méthodique de leur Genres, disposés en Familles. Paris, 1810.

Westwood, 1840—WESTWOOD, J. O. An Introduction to the Modern Classification of Insects. Vol. 2, Synopsis of the Genera of British Insects. London, 1840.

In the ensuing catalogue, the following new names have been proposed:

Archarpactus new name for *Arpactus* Jurine, 1801.

Crabro nesiotes new name for *Crabro unicolor* Smith, 1856 *nec* Panzer, 1797. [See *Xenocrabro* Perkins, 1902.]

Nysson (Epinysson) borinquenensis new name for *Nysson* (*Bathystegus* [sic!]) *basirufus* Rohwer, 1915 *nec* Brèthes, 1913. [See *Bathystegus* Rohwer, 1915.]

Philoponidea new name for *Philoponus* Kohl, 1889 *nec* Thorell, 1887.

Pluto new name for *Psenia* Malloch, 1933 *nec* Kirby, 1829.

Tachytes tingitanus new name for *Sphex tricolor* Fabricius, 1793 *nec* Schrank, 1781.

Zoyphidium new name for *Zoyphium* Kohl, 1893 *nec* Agassiz, 1846, *nec* Motschulsky, 1850.

Zyzzyx new name for *Therapon* Parker, 1929 *nec* Cloquet, 1819.

List of Generic and Subgeneric Names [3]

Ablepharipus Perkins, 1913. Trans. Ent. Soc. London, 1913, p. 390.

Type: *Crabro podagricus* Van der Linden, 1829 [= *Ablepharipus podagricus* (Van der Linden) = *Crabro* (*Crossocerus Blepharipus*) *podagricus* (Van der Linden)]. (Original designation.)

Acanthocrabro Perkins, 1913. Trans. Ent. Soc. London, 1913, p. 391.

Type: *Crabro vagabundus* Panzer, 1798 [= *Acanthocrabro vagabundus* (Panzer) = *Crabro* (*Crossocerus Acanthocrabro*) *vagabundus* (Panzer)]. (Original designation.)

Acanthostethus Smith, 1869. Trans. Ent. Soc. London, 1869, p. 306.

Type: *Acanthostethus basalis* Smith, 1869 [= ?*Nysson mysticus* Gerstaecker, 1866 = *Acanthostethus mysticus* (Gerstaecker)]. (Monobasic.)

Acolpus Vachal, 1893 *nec* Jayne, 1882.[4] Bull. Soc. Ent. France, lxii, p. cclxiv.

Type: *Aphilanthops* (*?*) *Theryi* Vachal [= *Acolpus Theryi* (Vachal) = *Philoponidea Theryi* (Vachal)].[4] (Monobasic.)

Agnosicrabro Kohl, 1915. Ann. K. K. Naturhist. Hofmus. Wien, xxix, p. 138. [Two species.]

Type: *Crabro occultus* Fabricius, 1805 [= *Crabro* (*Thyreopus Agnosicrabro*) *occultus* (Fabricius) = *C.* (*Crabro Agnosicrabro*) *occultus* (F.)]. (Present designation.)

Agraptus Wesmael, 1852. Bull. Acad. R. Sci. Belgique, xix, p. 108.

Type: *Sphex concinna* Rossi, 1790 [= *Agraptus concinnus* (Rossi) = *O.* (*Oryttus*) *concinnus* (Rossi)]. (Original designation and monobasic.)

Isogenotypic with *Oryttus* Spinola, 1836, *q.v.*

Alepidaspis A. Costa, 1882.[5] Att. R. Acad. Sci. fis. mat. Napoli, ix, p. 35. (Rendic. Acad. Sci. fis. Napoli, xxi, p. 197.)

Type: *Alepidaspis diphyllus* A. Costa, 1882 [= *Oxybelus lamellatus* Olivier, 1811 = *Oxybelus lamellatum* Olivier]. (Monobasic.)

Isogenotypic with *Notoglossa* Dahlbom, 1845, *q.v.*

Alliognathus Ashmead, 1899. Canad. Entom., xxxi, p. 219.

Type: *Crabro occidentalis* Fox, 1895 [= *Alliognathus occidentalis* (Fox) = *Rhopalum occidentale* (Fox) = *Euplilis occidentalis* (Fox)]. (Original designation and monobasic.)

[3] This list is believed to be complete up to the end of December, 1935, although a few names published during the following twelve months have been included.

[4] *Vide* footnote 172 under *Philoponidea*.

[5] Costa published *Alepidaspis* as new in two places, both of which sources were published in 1882. Since I have been unable to ascertain with absolute certainty which of the two was issued first I have given both references.

Alyson Jurine, 1807. Nouv. Méthod. Class. Hymén., p. 195.

TYPE: *Pompilus spinosus* Panzer, 1801 [= *Alyson spinosus* (Panzer) = *Alysson spinosus* (Panzer)]. (Monobasic.)

Isogenotypic with *Alysson* Jurine, 1801 and *Alysson* Panzer, 1806, *q.v.*

Alysson Jurine, 1801.[6] [In Panzer,] Erlang. Litt. Ztg., I, p. 164. [Three species.]

TYPE: *Pompilus spinosus* Panzer, 1801 [= *Alysson spinosus* (Panzer)]. (Designation of Morice & Durrant, 1914, Trans. Ent. Soc. Lond., p. 406.)

Isogenotypic with *Alysson* Panzer, 1806 and *Alyson* Jurine, 1807, *q.v.*

Alysson Panzer, 1806. Krit. Rev. Insektenf. Deutschl., II, p. 169. [Three species.]

TYPE: *Pompilus spinosus* Panzer, 1801 [= *Alysson spinosus* (Panzer)]. (Designation of Morice & Durrant, 1914, Trans. Ent. Soc. Lond., p. 406.)

Isogenotypic with *Alysson* Jurine, 1801 and *Alyson* Jurine, 1807, *q.v.*

Ammatomus A. Costa, 1859.[7] Faun. Regn. Napoli, Imen. Aculeat., Nyssonid., p. 36.

TYPE: *Gorytes coarctatus* Spinola, 1808 [= *Ammatomus coarctatus* (Spinola) = *A.* (*Ammatomus*) *coarctatus* (Spinola)]. (Monobasic.)

Ammobia Billberg, 1820. Enumerat. Insect., p. 105.[8] [Four species.]

TYPE: *Pepsis argentata* Fabricius, 1805 [= *Ammobia argentata* (Fabricius) = *Sphex argentata* Fabricius, 1787 [9]= ? *Sphex umbrosa* Christ, 1791 = *Chlorion* (*Ammobia*) *umbrosum* (Christ)]. (Designation of Rohwer, 1911, Psyche, XVIII, p. 153.)

Ammohilla Gussakovskij, 1928. Bull. Inst. Zool. Appl. Phytopath., Leningrad, IV, p. 7.

Typographical error or *lapsus calami* for *Ammophila* Kirby, 1798, *q.v.*

Ammophila Kirby, 1798.[10] Trans. Linn. Soc., London, IV, p. 199. [Four species.]

TYPE: *Sphex sabulosa* Linnaeus, 1758 [= *Ammophila sabulosa* (L.) = *S.* (*Sphex*) *sabulosus* (L.)]. (Designation of Latreille, 1810, p. 437.)

Isogenotypic with *Sphex* Linnaeus, 1758, *q.v.*

[6] *Vide* discussion of this name in Appendix I. At the recent Zoological Congress held in Lisbon the International Commission on Zoological Nomenclature voted to suppress the "Erlangen List."

[7] On page 56 of the same work Costa spells this name *Ammotomus*, but this may be regarded as a typographical error.

[8] I have not seen a copy of Billberg's paper, but have had to rely upon Rohwer's digest of it (Psyche, 1911, XVIII, p. 153).

[9] The identity of *Sphex argentata* F., 1787 is somewhat doubtful. Kohl indicates (1890, Ann. K. K. Naturhist. Hofmus., Wien, V, p. 208) that it may be conspecific with *Sphex umbrosa* Christ, 1791.

[10] *Vide* discussion of this name in Appendix II under *Sphex* Linnaeus.

Ammophilus Latreille, 1829. [In Cuvier,] Regn. Animal, (n. ed.), IV, p. 322.
Typographical error or *lapsus calami* for *Ammophila* Kirby, 1798, *q.v.*

Ammophilus Perty, 1833 [11] *nec* Latreille, 1829. Delect. Animal. Artic. Brasel., p. 141. [Two species.]
TYPE: *Ammophilus fumigatus* Perty [= *Podium fumigatum* (Perty)]. (Present designation.)

Ammophylus Latreille, 1802. Hist. Nat. Crust. Insect., III, p. 332.
Typographical error or *lapsus calami* for *Ammophila* Kirby, *q.v.*

Ammoplanellus Gussakovskij, 1931. Bol. R. Soc. Espan. Hist. Nat., XXXI, p. 442.
TYPE: *Ammoplanus* (*Ammoplanellus*) *chorasmius* Gussakovskij. (Original designation and monobasic.)

Ammoplanops Gussakovskij, 1931. Bol. R. Soc. Espan. Hist. Nat., XXXI, p. 457. [Three species.]
TYPE: *Ammoplanops carinatus* Gussakovskij. (Original designation.)

Ammoplanus Giraud, 1869. Ann. Soc. Ent. France, (4), IX, p. 469. [Two species.]
TYPE: *Ammoplanus Perrisi* Giraud [= *A.* (*Ammoplanus*) *Perrisi* Giraud]. (Present designation.)

Ammosphecidium Kohl, 1877. Verh. Zool.-Bot. Ges. Wien, XXVII, p. 701.
TYPE: *Ammosphecidium Helleri* Kohl, 1877 [= *Silaon compedita* Piccioli, 1869 = *Solierella compedita* (Piccioli)]. (Monobasic.)
Isogenotypic with *Silaon* Piccioli, 1869, and *Sylaon* Kohl, 1884, *q.v.*

Ampulex Jurine, 1807. Nouv. Méthod. Class. Hymén., p. 132. [Two species.]
TYPE: *Ampulex fasciata* Jurine, 1807 [= *A.* (*Ampulex*) *fasciata* Jurine]. (By elimination [12]; Shuckard, 1837, Essay Indig. Foss. Hymen., p. 18, footnote.)

Anacrabro Packard, 1866. Proc. Ent. Soc. Philadelphia, VI, p. 67.
TYPE: *Anacrabro ocellatus* Packard. (Monobasic.)

[11] Typographical error or *lapsus calami* for *Ammophila* Kirby?

[12] Shuckard was the first to use and characterize Leach's manuscript name, *Lorrheum*. He designated *Chlorion compressum* (F.) type of it, thus fixing *Ampulex fasciata* Jurine, 1807 as type of *Ampulex* Jurine, 1807. This consequently antedates and renders ineffectual the later attempts of Westwood (1842, Trans. Ent. Soc. Lond., III, p. 229), Smith (1856, Catal. Hymen. Brit. Mus., IV, p. 270, under *Ampulex purpurea* Westwood), and Kohl (1896, Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 236) to select *Chlorion compressum* (F.) as type of *Ampulex* Jurine, 1807. Westwood's citation of *Chlorion compressum* (F.) as type of *Ampulex* is really an inadvertent one, but it might be considered valid were it not for Shuckard's earlier fixation.

Ancistromma Fox, 1893. Proc. Acad. Nat. Sci. Philadelphia, XLV, p. 487. [Eleven species.]

TYPE: *Larrada distincta* Smith, 1856 [= *Ancistromma distincta* (Smith) = *Larropsis distincta* (Smith)]. (Designation of Rohwer, 1911, Proc. U. S. Nat. Mus., XL, p. 582.)

Anomiopteryx Gussakovskij, 1935. Trav. fil. Acad. Sci. URSS, Tadjikistan, no. 5, p. 418.

TYPE: *Anomiopteryx paradoxa* Gussakovskij. (Original designation and monobasic.)

Anothyreus Dahlbom, 1845. Hymen. Europ., I, pp. 519 & 526. [Four species.]

TYPE: *Crabro lapponicus* Zetterstedt, 1838 [= *Crabro* (*Anothyreus*) *lapponicus* (Zetterstedt) = *C.* (*Crabro Anothyreus*) *lapponicus* (Zetterstedt)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 213.)

Anoxybelus Kohl, 1923. Konowia, II, p. 274.

TYPE: *Oxybelus* (*Anoxybelus*) *Maidlii* Kohl. (Monobasic.)

Anthophilus Dahlbom, 1844. Hymen. Europ., I, p. 190. [Two species.]

TYPE: *Philanthus politus* Say, 1824 [= *Anthophilus politus* (Say) = *Philanthus politus* Say]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 294.)

Antronius Dalman MS, 1840. [In Zetterstedt,][13] Insect. Lappon., p. 443.

TYPE: *Stigmus pendulus* Panzer, 1804. (Monobasic.)
Isogenotypic with *Stigmus* Panzer, 1804, *q.v.*

Aphelotoma Westwood, 1842.[14] Trans. Ent. Soc. Lond., III, p. 225.

TYPE: *Aphelotoma tasmanica* Westwood. (Monobasic.)

Aphilanthops Patton, 1880. Proc. Boston Soc. Nat. Hist., XX, p. 401. [Three species.]

TYPE: *Philanthus frigidus* Smith, 1856 [= *Aphilanthops frigidus* (Smith) = *A.* (*Aphilanthops*) *frigida* (Smith)]. (Original designation.)

Apicerceris Minkiewicz, 1934. Polski Pismo Ent., XII, p. 253. [Two species.]

TYPE: *Sphex rybyensis* Linnaeus, 1771 [= *Cerceris* (*Apicerceris*) *rybyensis* (L.) = *Cerceris rybyensis* (L.)]. (Present designation.)
Isogenotypic with *Cerceris* Latreille, 1802 and *Apiraptrix* Shestakov, 1923, *q.v.*

[13] Zetterstedt (*loc. cit.*) lists *Antronius* Dalman as a synonym of *Stigmus* Panzer in which he includes but one species.

[14] *Vide* footnote 241 on *Trirogma* Westwood, 1842; *v. et.* footnote 52 on *Conocercus* Shuckard, 1840.

Apiraptrix Shestakov, 1923. Sbornik Jaroslav Gosudarst. Universitet., 1923, p. 101. [Thirty-three species.]

TYPE: *Sphex rybyensis* Linnaeus, 1771 [= *Cerceris* (*Apiraptrix*) *rybyensis* (L.) = *Cerceris rybyensis* (L.)]. (Original designation.)

Isogenotypic with *Cerceris* Latreille, 1802 and *Apicerceris* Minkiewicz, 1934, *q.v.*

Apius Jurine, 1801.[15] [In Panzer,] Erlang. Litt. Ztg., I, p. 163.

TYPE: *Sphex figulus* Linnaeus, 1758 [= *Apius figulus* (L.) = *T.* (*Trypoxylon*) *figulum* (L.)]. (Monobasic.)

Isogenotypic with *Trypoxylon* Latreille, 1796, *Apius* Panzer, 1806 and *Apius* Jurine, 1807, *q.v.*

Apius Panzer, 1806.[16] Krit. Rev. Insektenf. Deutschl., II, p. 10 & 106.

TYPE: *Sphex figulus* Linnaeus, 1758 [= *Trypoxylon figulus* (L.) = *T.* (*Trypoxylon*) *figulum* (L.)]. (Monobasic.)

Isogenotypic with *Trypoxylon* Latreille, 1796, and *Apius* Jurine 1801 and 1807, *q.v.*

Apius Jurine, 1807.[17] Nouv. Méthod. Class. Hymén., p. 140. [Three species.]

TYPE: *Sphex figulus* Linnaeus, 1758 [= *Apius figulus* (L.) = *T.* (*Trypoxylon*) *figulum* (L.)]. (Designation of Morice & Durrant, 1914, Trans. Ent. Soc. Lond., p. 394.)

Isogenotypic with *Trypoxylon* Latreille, 1796 and *Apius* Jurine, 1801 and *Apius* Panzer, 1806, *q.v.*

Apobembex Minkiewicz, 1934. Polski Pismo Ent., XII, p. 254. [Eight species.]

TYPE: *Bembex oculata* Latreille, 1805 [= *Bembex* (*Apobembex*) *oculata* (Latreille) = *Bembix oculata* (Latreille)]. (Present designation.)

Aporia Wesmael, 1852 *nec* Hübner, 1816 *nec* Macquart, 1845. Bull. Acad. R. Sci. Belgique, XIX, p. 272. [Three species.]

TYPE: *Trypoxylon equestre* Fabricius, 1805 [18] [= *Mimesa* (*Aporia*) *equestris* (F.) = *Psen* (*Mimesa*) *equestris* (F.)]. (Designation of Kohl, 1896, Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 293.)

Isogenotypic with *Mimesa* Shuckard, 1837, *q.v.*

[15] At the recent congress held in Lisbon the International Commission on Zoological Nomenclature voted to suppress the "Erlangen List." See note on this name in Appendix I.

[16] Panzer accredits *Apius* to Jurine and lists it as a synonym of *Trypoxyolon* Latreille.

[17] Jurine admits that his *Apius* is the same as *Trypoxylon* Latreille.

[18] *Vide* Richards' note (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 166) on the identity of *Trypoxylon equestre* F., 1805.

Archarpactus new name for *Arpactus* Jurine, 1801.[19]

TYPE: *Sphex mystacea* Linnaeus, 1761 [= *Argogorytes* (*Archarpactus*) *mystaceus* (L.)]. (Present designation.)

Isogenotypic with *Arpactus* Jurine, 1801, *q.v.*

Argogorytes Ashmead, 1899. Canad. Entom., XXXI, p. 324.

TYPE: *Gorytes carbonarius* Smith, 1856 [= *Argogorytes carbonarius* (Smith) = *A.* (*Argogorytes*) *carbonarius* (Smith)]. (Original designation.)

Argyrammophila Gussakovskij, 1928. Bull. Inst. Zool. Appl. Phytopath., Leningrad, IV, p. 7. [Three species.]

TYPE: *Ammophila induta* Kohl, 1901 [= *Ammophila* (*Argyrammophila*) *induta* (Kohl) = *Sphex* (*Argyrammophila*) *indutus* (Kohl)]. (Original designation.)

Arigorytes Rohwer, 1912. Proc. U. S. Nat. Mus., XLI, p. 469.

TYPE: *Gorytes Coquillettii* Fox, 1895[20] [= *Arigorytes Coquillettii* (Fox)]. (Original designation.)

Arpactophilus Smith, 1863.[21] Proc. Linn. Soc., Zool., VII, p. 36.

TYPE: *Arpactophilus bicolor* Smith. (Monobasic.)

Arpactus Jurine, 1801.[15] [In Panzer,] Erlang. Litt. Ztg., I, p. 164. [Two species.]

TYPE: *Sphex mystacea* Linnaeus, 1761 [(= *Mellinus mystaceus* Fabricius, 1790) = *Arpactus mystaceus* (L.) = *Argogorytes* (*Archarpactus*) *mystaceus* (L.)]. (Designation of Morice & Durrant, 1914, Trans. Ent. Soc. Lond., p. 403.)

Isogenotypic with *Archarpactus* new name, *q.v.*

Arpactus Panzer, 1805.[22] Faun. Insect. German., hft., 98, no. 17.

TYPE: *Mellinus quadrifasciatus* Fabricius, 1805 [= *Mellinus* (*Arpactus*) *quadrifasciatus* (Fabricius) = *G.* (*Gorytes*) *quadrifasciatus* (F.)]. (Monobasic.)

Arpactus Panzer, 1806[22] *nec* Panzer, 1805. Krit. Rev. Insektenf. Deutschl., II, p. 164. [Six species.]

[19] Erlang. Litt. Ztg., 1801, I, p. 164. *Vide* discussion of this name under *Arpactus* Panzer, 1805 in Appendix I.

[20] I have examined the type of *Gorytes Coquillettii* Fox, 1895 in the collection of the United States National Museum and the type of *Gorytes insolitus* Fox, 1895 in the collection of the Academy of Natural Sciences of Philadelphia and believe them to be merely the opposite sexes of the same species.

[21] *Vide Harpactophilus* Kohl.

[22] *Vide* discussion of this name in Appendix I.

TYPE: *Mellinus quadrifasciatus* Fabricius 1805 [= *Arpactus quadrifasciatus* (F.) = *G.* (*Gorytes*) *quadrifasciatus* (F.)]. (Present designation.) [23]

Isogenotypic with *Arpactus* Panzer, 1805, *q.v.*

Arpactus Jurine, 1807 *nec* Jurine, 1801, *nec* Panzer, 1805 and 1806. Nouv. Méthod. Class. Hymén., p. 192. [Eight species.]

TYPE: *Arpactus formosus* Jurine, 1807 [= *Mutilla laevis* Latreille, 1792 = *Dienoplus laevis* (Latreille)]. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 220.)

Isogenotypic with *Harpactus* Shuckard, 1837 and *Harpactes* Dahlbom, 1844 *nec* Swainson, 1833, *q.v.*

Aspidion Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [Nomen Nudum.]

Astata Latreille, 1796.[24] Prec. Charac. Gen. Insect., p. xiii. [No species.] 1802. Hist. Nat. Crust. Insect., III, p. 336.

TYPE: *Tiphia abdominalis* Panzer, 1798 [= *Sphex boops* Schrank, 1781 = *Astata boops* (Schrank) = *A.* (*Astata*) *boops* (Schrank)]. (Monobasic, fixed by Latreille, 1802, *l. c.*)

Isogenotypic with *Astatus* Latreille, 1796, *Dimorpha* Jurine, 1801 and 1807, and *Dimorpha* Panzer, 1806, *q.v.*

Astatus Latreille, 1796.[24] Prec. Charac. Gen. Insect., p. 114. [No species.]

Emended to, and isogenotypic with *Astata* Latreille, 1796, *q.v.*

Atelosphex Arnold, 1923. Ann. Transvaal Mus., IX, p. 177.

TYPE: *Atelosphex miscophoides* Arnold. (Original designation and monobasic.)

[23] Morice & Durrant may be considered by some to have designated *Sphex mystacea* L., 1761 [= *Arpactus mystaceus* (L.) = *Argogorytes* (*Archarpactus*) *mystaceus* (L.)] the type of *Arpactus* Panzer, 1806, in 1914 (Trans. Ent. Soc. Lond., p. 403). See discussion of the name *Arpactus* in Appendix I.

[24] Latreille proposed the genus on page 114 of his Precis, first as *Astatus* but on page xiii of the preface of this work changed it to *Astata* and thereafter in all his works used this orthography, as have most other authors. A few, however, have reverted to the form *Astatus*, contending that inasmuch as this was the form in which it was originally proposed, this orthography should be employed. Certainly much can be said for taking this view, since the spelling *Astatus* may not be regarded as a mere typographical error. This is immediately disproved by Latreille's own statement (Precis, page xiii): ". . . J'ai oublié de corriger la faute suivante et qui est essentielle; *Pag.* 114, au lieu d'*Astatus*, lisez *Astata;* Ce premier nom pourroit se confondre avec cet autre *Astacus*, *pag.* 195. . . ." The spelling *Astata* must therefore be regarded in the light of a deliberate emendation and as such ordinarily not admissible as a valid name. However, inasmuch as both forms of the name were proposed in the same work, and presumably issued on the same date, it is permissible and in conformance with the International Code of Zoological Nomenclature (*v.* Opinion 28) to adopt *Astata* as the correct spelling for this genus, particularly inasmuch as Latreille used this form in 1802 and in all his subsequent works, and may without question be regarded as the first reviser of the genus.

Auchenophorus Turner, 1907. Ann. & Mag. Nat. Hist., (7), XIX, p. 270. [Three species.]

TYPE: *Auchenophorus coruscans* Turner. (Original designation.)

Aulacophilus Smith, 1869. Trans. Ent. Soc. Lond., 1869, p. 305.

TYPE: *Aulacophilus vespoides* Smith. (Monobasic.)

Austrostigmus Turner, 1912. Ann. & Mag. Nat. Hist., (8), X, p. 55. [Two species.]

TYPE: *Stigmus queenslandensis* Turner [= *Austrostigmus queenslandensis* (Turner)]. (Original designation.)

Bathystegus Rohwer, 1915.[25] Proc. U. S. Nat. Mus., XLIX, p. 247.

An obvious *lapsus calami* or typographical error for *Brachystegus* Auctt., *nec* A. Costa,[27] *q.v.*

Belomicroides Kohl, 1900. Ann. K. K. Naturhist. Hofmus., Wien, XIV, p. 312.

TYPE: *Belomicroides Schmiedeknechtii* Kohl. (Monobasic.)

Belomicrus A. Costa, 1871. Ann. Mus. Zool., Univ. Napoli, VI, p. 80.

TYPE: *Belomicrus italicus* A. Costa [= *B.* (*Belomicrus*) *italicus* A. Costa]. (Monobasic.)

[25] Rohwer in 1915 (*loc. cit.*) described a *Nysson* (*Bathystegus* [sic!]) *basirufus* from Puerto Rico. I regard the spelling *Bathystegus* as an obvious typographical error or *lapsus calami* for *Brachystegus* which Rohwer and other authors, before and since, until recently used as a subgeneric name for those species of *Nysson* in which the cubitus of the hind wing arises beyond the transverse median vein. As I have indicated elsewhere (1935, Ent. News, XLVI, p. 250), however, this has been a misapplication of the name; *Brachystegus* A. Costa is an entirely old world group closely related to the new world genus *Zanysson*, and for *Brachystegus* Aucct. *nec* Costa I therefore recently proposed the name *Epinysson* with *Nysson basilaris* Cresson as type. Inasmuch as *Nysson* (*Epinysson*) *basilaris* (Cresson) is strictly congeneric with *Nysson* (*Bathystegus* [sic!]) *basirufus* Rohwer, it is possible that some will contend that it will be necessary to use *Bathystegus* rather than *Epinysson* for this subgenus of *Nysson*, but inasmuch as Rohwer has never given any indication that he was aware of this situation, I do not propose to adopt nor to regard this misspelling as the valid proposal of a new name, particularly in view of the fact that Rohwer's papers are replete with typographical errors or *lapsus calami* of this sort, *e.g. Cereonus* for *Cemonus*, *Magalomma* for *Megalomma*, *Trichiogorytes* for *Trichogorytes*, etc., *q.v.* Adoption of such errors merely places a premium and undue emphasis on hasty work. This case is somewhat complicated by the fact that Wolcott in his lists of the insects of Puerto Rico (1923, Journ. Dept. Agr., Univ. Puerto Rico, VII, p. 43; and 1936, *idem*, XX, p. 556) has unfortunately reproduced Rohwer's error. For those who wish to use Rohwer's mistake, *Bathystegus* may be regarded as monobasic with *Nysson* (*Bathystegus* [sic!]) *basirufus* Rohwer, 1915 as type. Rohwer's specific name, however, is a homonym of Brèthes' earlier one (1913, An. Mus. Nac. Hist. Nat. Buenos Aires, XXIV, p. 135); consequently I have proposed *Nysson* (*Epinysson*) *borinquenensis* for *Nysson* (*Bathystegus* [sic!]) *basirufus* Rohwer, 1915 *nec* Brèthes, 1913. (See p. 4.)

[27] *Vide* Pate, 1935, Ent. News, XLVI, p. 250.

Bembecinus A. Costa, 1859. Faun. Regn. Napoli, Imen. Acul., Nyssonid., p. 4.

TYPE: *Bembecinus meridionalis* A. Costa.[28] (Monobasic.)

Bembex Fabricius, 1777.[31] Gen. Insect., p. 122. [No species.][29] 1781. Spec. Insect., p. 457. [Four species.]

TYPE: *Apis rostrata* Linnaeus, 1758[29] [= *Bembex rostrata* (L.) = *Bembix rostrata* (L.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Bembix* F., 1775, *Bembyx* F., 1775, and *Epibembex* Minkiewicz, 1934, *q.v.*

Bembidula Burmeister, 1874. Bol. Acad. Nac. Cienc. Ex. Univ. Cordova, Argentina, I, p. 122. [Two species.]

TYPE: *Monedula discisa* Taschenberg, 1870 [= *Bembidula discisa* (Taschenberg) = *Bicyrtes discisa* (Taschenberg)].[30] (Designation of Parker, 1917, Proc. U. S. Nat. Mus., LII, p. 56.)

Bembix Fabricius, 1775.[31] Syst. Ent., Charac. Gen., p. 13. [No species.] 1914, Morice & Durrant, Trans. Ent. Soc., London, p. 400. [Many species.]

TYPE: *Apis rostrata* Linnaeus, 1758 [= *Bembix rostrata* (L.)]. (Fixed by Morice & Durrant, 1914, Trans. Ent. Soc. Lond., p. 400.)

Isogenotypic with *Bembyx* Fabricius, 1775, *Bembex* Fabricius, 1777, and *Epibembex* Minkiewicz, 1934, *q.v.*

[28] Patton (1879, Bull. U. S. Geol. Surv., v, p. 345) designated *Vespa tridens* Fabricius, 1781 the type of *Bembecinus*, incorrectly assuming that *Bembecinus meridionalis* Costa, 1859 was a synonym of Fabricius' species. *Vespa tridens* F., 1781 is the type of *Stizomorphus* A. Costa, 1859 which, if we follow Patton, becomes isogenotypic with *Bembecinus*. However, as Handlirsch has shown (1892, Sitzber. Akad. Wiss. Wien, CI), the two species are unquestionably discrete. Parker (1929, Proc. U. S. Nat. Mus., LXXV, Art. 5, p. 8) has unfortunately continued Patton's error.

[29] Strictly speaking, Fabricius in 1777 included one species, *Bembex signata* (L.), in *Bembex* which consequently should be regarded as monobasic with this species as type and Latreille's designation of *Bembex rostrata* [F.] is therefore invalid. However, inasmuch as Fabricius assigns the same number—genus 115—to *Bembex* in the Genera Insectorum as to *Bembix* and *Bembyx* in the Systema Entomologiae and furthermore states on page xiii of the introduction of the Genera Insectorum, ". . . Species insectorum in Systemate Entomologiae Flensburgi 1775 dedi . . ." it is clear that the spelling *Bembex* must be regarded as merely an emendation of *Bembix*. If this course is not followed then *Bembex* Fabricius, 1777 must be used for *Monedula* Latreille, 1802 *nec* Linnaeus [in Hasselquist], 1762, *nec* Moehring, 1758 [= *Stictia* Illiger, 1807] of which the type is likewise *Bembex signata* (L.) by designation of Latreille, 1810.

[30] Parker (1917, Proc. U. S. Nat. Mus., p. 56) is the authority for this synonymy. *Cf.* footnote 72 on *Dumonela* Reed, 1894.

[31] *Bembix* is the original spelling proposed by Fabricius and is, from an etymological standpoint, the correct one. *Bembyx* and *Bembex* should be regarded as emendations, typographical errors or *lapsus calami*.

Bembyx Fabricius, 1775.[31] Syst. Ent., p. 361. [Five species.]

TYPE: *Apis rostrata* Linnaeus, 1758 [= *Bembyx rostrata* (L.) = *Bembix rostrata* (L.)]. (Designation of Rohwer, 1912, Proc. U. S. Nat. Mus., XLI, p. 466.)

Isogenotypic with *Bembix* Fabricius, 1775, *Bembex* Fabricius, 1777, and *Epibembex* Minkiewicz, 1934, *q.v.*

Bicyrtes Lepeletier, 1845. Hist. Nat. Insect., Hymén., III, p. 53.

TYPE: *Bicyrtes Servillii* Lepeletier, 1845 [= *Monedula ventralis* Say, 1824 = *Bicyrtes ventralis* (Say)].[32] (Monobasic.)

Blepharipus Lepeletier & Brullè, 1835.[33] Ann. Soc. Ent. France, III, p. 728. [Nine species.]

TYPE: *Blepharipus nigrita* Lepeletier & Brullè, 1835 [33] [(= ? *Crabro pubescens* Shuckard, 1837) = *Crabro* (*Crossocerus Blepharipus*) *nigritus* (Lepeletier & Brullè)]. (Designation of Ashmead,[33] 1899, Canad. Entom., XXXI, p. 215.)

Bothynostethus Kohl, 1883. Verh. Zool.-Bot. Ges., Wien, XXXIII, p. 344.

TYPE: *Bothynosthethus Saussurei* Kohl. (Monobasic.)

Brachymerus Dahlbom, 1845 *nec* Chevrolat, 1835 and 1841. Hymen. Europ., I, p. 519.

TYPE: *Crabro* (*Brachymerus*) *Megerlei* Dahlbom, 1845 [= *Crabro* (*Crossocerus*) *curvitarsis* Herrich-Schaeffer, 1840 = *Tracheliodes curvitarsis* (Herrich-Schaeffer)]. (Monobasic.)

Isogenotypic with *Tracheliodes* Morawitz, 1866, *q.v.*

Brachystegus A. Costa, 1859.[34] Faun. Regn. Napoli, Imen. Acul., Nyssonid., p. 24.

TYPE: *Nysson Dufouri* Dahlbom, 1845 [= *Brachystegus Dufouri* (Dahlbom) = *Nysson scalaris* Illiger, 1807 = *Brachystegus scalaris* (Illiger)]. (Monobasic.)

Brimocelus Arnold, 1927. Ann. Transvaal Mus., XII, p. 62.

TYPE: *Belomicrus* (*Brimocelus*) *radiatus* Arnold [= *Brimocelus radiatus* (Arnold)]. (Original designation and monobasic.)

[32] Parker (1917, Proc. U. S. Nat. Mus., LII, p. 59) is the authority for this synonymy.

[33] Westwood's designation (1840, p. 80) of *Crabro dimidiatus* Fabricius, 1781 as type of *Blepharipus* is invalid inasmuch as he specifically states that this species is to be regarded merely as an example. Ashmead's designation of *B. nigrita* is apparently the next valid one. The exact identity, however, of *Blepharipus nigrita* Lepeletier & Brullè, 1835 is a moot point. If Kohl's conjecture (1915, Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 229), that *Crabro pubescens* Shuckard, 1837 and *Blepharipus nigrita* Lepeletier & Brullè, 1835 are conspecific, is correct, then *Blepharipus* Lepeletier & Brullè, 1835 and *Coelocrabro* Thomson, 1874 are isogenotypic. In any event, it would appear that the two groups are congeneric and that Lepeletier and Brullè's name must be used in preference to Thomson's.

[34] *Vide* Pate, 1935, Ent. News, XLVI, p. 250.

Bucerceris Minkiewicz, 1934. Polski Pismo Ent., XII, p. 253.

TYPE: *Cerceris bupresticida* Dufour, 1841 [= *Cerceris* (*Bucerceris*) *bupresticida* (Dufour) = *Cerceris bupresticida* Dufour]. (Monobasic.)

Caenolarra Cameron, 1900.[35] Ann. & Mag. Nat. Hist., (7), V, p. 28.

TYPE: *Caenolarra appendiculata* Cameron [= *Leptolarra appendiculata* (Cameron) = *Motes* (*Leptolarra*) *appendiculata* (Cameron)]. (Monobasic.)

Caenopsen Cameron, 1899.[36] Ann. & Mag. Nat. Hist., (7), IV, p. 55.

TYPE: *Caenopsen fuscinervis* Cameron. (Monobasic.)

Callosphex Rohwer, 1913.[37] Proc. U. S. Nat. Mus., XLIV, p. 450.

A *lapsus calami* for *Calosphex* Kohl, 1890, *q.v.*

Calosphex Kohl, 1890. Ann. K. K. Naturhist. Hofmus., Wien, V, p. 113. [Four species.]

TYPE: *Sphex niveatus* Dufour, 1853 [= *Sphex* (*Calosphex*) *niveatus* (Dufour) = *Chlorion* (*Calosphex*) *niveatum* (Dufour)]. (Present designation.)

Calotachytes Turner, 1917. Ann. & Mag. Nat. Hist., (8), XX, p. 10. [Three species.]

TYPE: *Tachytes marshalli* Turner, 1912 [= *Tachytes* (*Calotachytes*) *marshalli* (Turner)]. (Original designation.)

Celia Shuckard, 1837 *nec* Zimmermann, 1832. Essay Indig. Foss. Hymen., p. 182.

TYPE: *Stigmus troglodytes* Van der Linden, 1829 [= *Celia troglodytes* (Van der Linden) = *Spilomena troglodytes* (Van der Linden)]. (Original designation and monobasic.)

Isogenotypic with *Spilomena* Shuckard, 1838, *q.v.*

Cemonus Jurine, 1801.[38] [In Panzer,] Erlang. Litt. Ztg., I, p. 164.

TYPE: [*Sphex*] *Crabro unicolor* Panzer, 1797 *nec* Fabricius, 1787 [= (*Cemonus unicolor* (Panzer) =) *Cemonus rugifer* Dahlbom, 1844[39] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Monobasic.)

Isogenotypic with *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1807, *Dineurus* Westwood, 1837, *Diphlebus* Westwood, 1840, and *Chevrieria* Kohl, 1883 *nec* O. Heer, 1839, *q.v.*

[35] *Vide* discussion of the name *Motes* Kohl, 1896 in Appendix III.

[36] This group is unknown to me. In all probability, however, it is only a subgenus of *Psen* Latreille.

[37] Rohwer accredits this name to Kohl and includes but one species: *Callosphex erythrogaster* Rohwer.

[38] *Vide* discussion of this name under *Cemonus* Panzer, 1806 in Appendix I.

Cemonus Panzer, 1806.[38] Krit. Rev. Insektenf. Deutschl., II, p. 186.

TYPE: *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787 [= (*Cemonus unicolor* (Panzer) =) *Cemonus rugifer* Dahlbom, 1844 [39] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Monobasic.)

Isogenotypic with *Cemonus* Jurine, 1801 and 1807, *Dineurus* Westwood, 1837, *Diphlebus* Westwood, 1840, and *Chevrieria* Kohl, 1883 *nec* O. Heer, 1839, *q.v.*

Cemonus Jurine, 1807.[38] Nouv. Méthod. Class. Hymén., p. 213. [Three species.]

TYPE: *Cemonus unicolor* F[abricius] [= *Sphex unicolor* Jurine, (*i.e. Cemonus* Jurine, 1807, 2. Fam., p. 214, footnote) = *Pelopoeus unicolor* Fabricius, 1805 = *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787 = *Cemonus rugifer* Dahlbom, 1844 [39] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 199.)

Isogenotypic with *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1801, *Dineurus* Westwood, 1837, *Diphlebus* Westwood, 1840, *Chevrieria* Kohl, 1883 *nec* O. Heer, 1839, *q.v.*

Ceratocolus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 739. [Ten species.]

TYPE: *Crabro alatus* Panzer, 1797 [40] [= *Ceratocolus alatus* (Panzer) = *Crabro* (*Ceratocolus*) *alatus* (Panzer) = *Crabro* (*Lestica Ceratocolus*) *alatus* (Panzer)]. (Designation of Ashmead,[40] 1899, Canad. Entom., XXXI, p. 170.)

Ceratophorus Shuckard, 1837. Essay Indig. Foss. Hymen., p. 195.

TYPE: *Pemphredon morio* Van der Linden, 1829 [= *Ceratophorus morio* (Van der Linden) = *Pemphredon* (*Ceratophorus*) *morio* (Van der Linden)]. (Original designation and monobasic.)

Ceratosphex Rohwer, 1921. Philippine Journ. Sci., XIX, p. 671.

TYPE: *Sphex* (*Ceratosphex*) *bakeri* Rohwer. (Original designation and monobasic.)

Ceratostizus Rohwer, 1921.[41] Proc. U. S. Nat. Mus., LIX, p. 412.

TYPE: *Gorytes moneduloides* Packard, 1867 [= *Ceratostizus moneduloides* (Packard) = *Tanyoprymnus longitarsis* Cameron, 1905 [41] = *Ammatomus* (*Tanyoprymnus*) *moneduloides* (Packard)]. (Original designation.)

Isogenotypic with *Tanyoprymnus* Cameron, 1905, *q.v.*

[39] Bluthgen (1931, Konowia, X, pp. 121–129) is the authority for this synonymy.

[40] Westwood's citation in 1840 (p. 80) of *Crabro Lindenius* Shuckard, 1837 [= *Ceratocolus striatus* Lepeletier & Brullè, 1835] may not be construed as a valid type fixation because, in the first place, he specifically states that it is only an example, and secondly, because Shuckard's species was not one originally included in *Ceratocolus*.

[41] *Vide* Pate, 1935, Ent. News, XLVI, p. 249.

Cerceris Latreille, 1802. Hist. Nat. Crust. Insect., III, p. 367. [Three species.]

TYPE: *Philanthus ornatus* Fabricius, 1790 [= *Sphex rybyensis* Linnaeus, 1771 = *Cerceris rybyensis* (L.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Apiraptrix* Shestakov, 1923 and *Apicerceris* Minkiewicz, 1934, *q.v.*

Cereonus Rohwer, 1910.[42] Ent. News, XXI, p. 170.

An evident *lapsus calami* for *Cemonus* Jurine, 1807, *q.v.*

Chalcolamprus Wesmael, 1852. Bull. Acad. R. Sci. Belg., XIX, p. 590.

TYPE: *Crabro albilabris* Fabricius, 1793 [= *Lindenius* (*Chalcolamprus*) *albilabris* (F.) = *Lindenius albilabris* (F.)]. (Monobasic.)

Isogenotypic with *Lindenius* Lepeletier & Brullè, 1835, *q.v.*

Chalybion Dahlbom, 1844. Hymen. Europ., I, p. 21. [Three species.]

TYPE: *Sphex cyanea* Fabricius, 1775 [43] [= *Chalybion cyaneum* (F.)]. (Designation of Patton, 1880, Proc. Boston Soc. Nat. Hist., XX, p. 378.)

Isogenotypic with *Chalybium* Schulz, 1906, *q.v.*

Chalybium Schulz, 1906.[44] Spolia Hymenopterologica, p. 192.

Emendation for, and isogenotypic with *Chalybion* Dahlbom, 1844, *q.v.*

Cheilopogonus Westwood, 1834. Zool. Journ., V, p. 441.

TYPE: *Cheilopogonus punctiger* Westwood, 1834 [= *Vespa gibbosa* Fabricius, 1775 = *Philanthus gibbosus* (F.)]. (Monobasic.)

Isogenotypic with *Chilopogon* Kohl, 1896, *q.v.*

Chevrieria Kohl, 1883 *nec* O. Heer, 1839.[38] Mitth. Schweiz. Ent. Ges., VI, p. 658. [Three species.]

TYPE: *Pelopoeus unicolor* Fabricius, 1805 [= (*Pemphredon* (*Chevrieria*) *unicolor* [Fabricius]) = *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787 = *Cemonus rugifer* Dahlbom, 1844 [39] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Original designation.)

Isogenotypic with *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1801 and 1807, *Dineurus* Westwood, 1837, and *Diphlebus* Westwood, 1840, *q.v.*

[42] Rohwer includes but one species: *Pemphredon* (*Cereonus* [sic!]) *harbecki* Rohwer.

[43] The synonymy of this species is somewhat involved. Dahlbom states that his *Chalybion cyaneum* is *Sphex cyanea* Linnaeus, giving as a bibliographic reference of the latter, Syst. Nat., Ed. 12, 2. [p.] 941. [no.] 2., but this reference applies to *Sphex coerulea* Linnaeus, 1767 which as Fernald has shown (1904, Ent. News, XV, pp. 117–118) is not *Sphex coerulea* Linnaeus, 1758 but quite another species. *Sphex coerulea* Linnaeus, 1767 is therefore a homonym and consequently may not be used. It is necessary, therefore, to use *Sphex cyanea*, the name which Fabricius gave this species in 1775 (Syst. Ent., p. 346).

[44] Agassiz in the Index Universalis of his Nomenclator Zoologicus of 1846 was actually the first to emend *Chalybion* to *Chalybium*.

Chilopogon Kohl, 1896.[45] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 329.

Emendation for, and isogenotypic with *Cheilopogonus* Westwood, 1834, *q.v.*

Chlorampulex Saussure, 1892. [In Grandidier,] Hist. Nat. Madagascar, XX, Hymen., p. 441. [Three species.]

TYPE: *Sphex compressa* Fabricius, 1781 [= *Chlorampulex compressa* (F.) = *A.* (*Ampulex*) *compressa* (F.)]. (Present designation.)

Isogenotypic with *Lorrheum* Leach MS, 1837 [in Shuckard], *q.v.*

Chlorion Latreille, 1802. Hist. Nat. Crust. Insect., III, p. 333.

TYPE: *Sphex lobata* Fabricius, 1775 [= *Chlorion lobatum* (F.) = *Ch.* (*Chlorion*) *lobatum* (F.)]. (Monobasic.)

Isogenotypic with *Chlorium* Schulz, 1906, *q.v.*

Chlorium Schulz, 1906. Spolia Hymenopterologica, p. 193.

Emendation for, and isogenotypic with *Chlorion* Latreille, 1802, *q.v.*

Chrysolarra Cameron, 1901.[46] Ann. & Mag. Nat. Hist., (7), VIII, p. 118. [Four species.]

TYPE: *Chrysolarra appendiculata* Cameron. (Present designation.)

Clitemnestra Spinola, 1851.[47] [In Gay,] Hist. fis. pol. Chile, Zool., VI, p. 341.

TYPE: *Arpactus* (*Clitemnestra*) *Gayi* Spinola [= *C.* (*Clitemnestra*) *Gayi* (Spinola)]. (Monobasic and original designation.)

Clypeadon Patton, 1897. Ent. News, VIII, p. 13.

TYPE: *Aphilanthops quadrinotatus* Ashmead, 1890 [= *Clypeadon quadrinotatus* (Ashmead) = *Aphilanthops* (*Clypeadon*) *quadrinotata* (Ashmead)]. (Monobasic and original designation.)

Clypeocrabro Richards, 1935.[48] Trans. R. Ent. Soc. Lond., LXXXIII, p. 167.

TYPE: *Apis clypeata* Schreber, 1759 [= *Clypeocrabro clypeatus* (Schreber) = *Crabro* (*Lestica Clypeocrabro*) *clypeatus* (Schreber)]. (Original designation.)

Isogenotypic with *Thyreus* Lepeletier & Brullè, 1835 *nec* Panzer, 1806, *nec* Swainson, 1821, *q.v.*

Clytemnestra Saussure, 1867 *nec* Dana, 1848.[49] Reise der Novara, Hymen., p. 75. [Two species.]

[45] So far as I have been able to determine Kohl was the first to use this emendation of Westwood's name. Sherborn in the Index Animalium likewise uses this emended form and gives the same reference for this orthography as for *Cheilopogonus*. I have been unable, however, to find that Westwood ever used this spelling.

[46] *Vide* footnote 348 on this name under *Motes* Kohl, 1896 in Appendix III.

[47] This name is not preoccupied by *Clytemnestra* Dana, 1848 as Turner (1915, Ann. & Mag. Nat. Hist., (8), XV, p. 67) has contended.

[48] Proposed as a new name for *Thyreus* Lepeletier & Brullè, 1835 *nec* Panzer, 1806, *q.v.*

[49] This is no doubt merely an emendation for *Clitemnestra* Spinola, 1851.

TYPE: *Harpactus Gayi* Spinola, 1851 [= *Harpactus* (*Clytemnestra*) *Gayi* Spinola = *C.* (*Clitemnestra*) *Gayi* (Spinola)]. (Present designation.)

Isogenotypic with *Clitemnestra* Spinola, 1851, *q.v.*

Clytochrysus Morawitz, 1864. Bull. Acad. Sc. St. Petersbourg, VII, p. 454. [Two species.]

TYPE: *Crabro chrysostomus* Lepeletier & Brullè, 1835 *nec* Gmelin, 1790 [= (*Crabro* (*Clytochrysus*) *chrysostomus* (Lepeletier & Brullè) =) *Crabro comptus* Lepeletier & Brullè, 1835 = *Crabro* (*Ectemnius Clytochrysus*) *comptus* (Lepeletier & Brullè)]. (Designation of Richards, 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 168.)

Coelocrabro Thomson, 1874. Hymen. Scandinav., III, pp. 262 & 264. [Eleven species.]

TYPE: *Crabro pubescens* Shuckard, 1837 [= *Crabro* (*Coelocrabro*) *pubescens* (Shuckard) = (? *Blepharipus nigrita* Lepeletier & Brullè, 1835) = *Crabro* (*Crossocerus Blepharipus*) *pubescens* (Shuckard)]. (Designation of Richards,[50] 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 166.)

Coeloecus Verhoeff, 1890. Ent. Nachr., XVI, p. 383. [Three species.]

TYPE: *Diodontus gracilis* Curtis, 1834 [51] [= *Passaloecus* (*Coeloecus*) *gracilis* (Curtis)]. (Present designation.)

Coloptera Lepeletier, 1845. Hist. Nat. Insect., Hymen., III, p. 387.

TYPE: *Coloptera barbara* Lepeletier [= *Sphex* (*Coloptera*) *barbara* (Lepeletier)]. (Monobasic.)

Conocercus Shuckard, 1840.[52] Lardner's Cabinet Encyclopaed., VIII, p. 180. [No species.]

[50] I have given Richards the credit of designating the type, although I am actually of the opinion that Ashmead fixed the type in 1899 (Canad. Entom., XXXI, p. 215) as *Blepharipus nigrita* Lepeletier & Brullè, 1835. It is true that *B. nigrita* was not a species originally included by Thomson in *Coelocrabro*, but the eighth volume of Dalla Torre's Catalogus Hymenopterorum had appeared by 1899 and *Crabro pubescens* Shuckard, 1837, a species originally placed in *Coelocrabro*, is listed there as a synonym of *Blepharipus nigrita* Lepeletier & Brullè, 1835. It is fairly safe to assume, therefore, that Ashmead was cognizant of this. In all probability *Coelocrabro* Thomson, 1874 is isogenotypic with *Blepharipus* Lepeletier & Brullè, 1835. In this connection, see footnote on the latter name.

[51] *Vide* Richards, 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 165.

[52] Westwood (1842, Trans. Ent. Soc. Lond., III, p. 230) remarks that "... the New Holland genus, indicated by name only, I presume from its name and locality ... is identical with my genus *Aphelotoma*. As, however, it had stood in my cabinet as a new genus for several years before it existed in any other collection, I trust that my name and the very detailed description and figure given of the insect at the last meeting of the Society, before even the name *Conocercus* had appeared, will be received with the courtesy which is given to memoirs read before scientific bodies. ..."

Corynopus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 802.

TYPE: *Crabro tibialis* Fabricius, 1798 *nec* Olivier, 1791 [= (*Corynopus tibialis* (F.) =) *Sphex coarctata* Scopoli, 1763 = *Rhopalum coarctatum* (Scopoli) = *Euplilis coarctatus* (Scopoli)]. (Monobasic.)

Crabro Fabricius, 1775 *nec* Geoffroy, 1762.[53] Syst. Ent., Char. Gen., p. 12 [no species]; p. 373. [Thirteen species.]

TYPE: *Vespa cribraria* Linnaeus, 1758 [= *Crabro cribrarius* (L.) = *C.* (*C. Crabro*) *cribrarius* (L.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Pemphilis* Risso, 1826 [54] and *Thyreopus* Lepeletier & Brullè, 1835, *q.v.*

Cratolarra Cameron, 1900. Ann. & Mag. Nat. Hist., (7), V, p. 34.

TYPE: *Cratolarra femorata* Cameron [= *Larra femorata* (Cameron)].[55] (Monobasic.)

Crossocerus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 763. [Thirty species.]

TYPE: *Crabro scutatus* Fabricius, 1787 [= *Crossocerus scutatus* (F.) = *Sphex palmaria* Schreber, 1784 = *Sphex palmipes* Linnaeus, 1767 [56] = *Crabro* (*C. Crossocerus*) *palmipes* (L.)]. (Designation of Ashmead,[57] 1899, Canad. Entom., XXXI, p. 215.)

Cuphopterus Morawitz, 1866.[59] Bull. Acad. Sci. St. Petersbourg, IX, p. 252.

TYPE: *Crabro* (*Blepharipus*) *subulatus* Dahlbom, 1845 = *Crabro* (*Cuphopterus*) *subulatus* (Dahlbom) = *Crabro* (*Blepharipus*) *monstrosus* Herrich-Schaeffer, 1845 [in Dahlbom] = *Crabro* (*Crossocerus Cuphopterus*) *monstrosus* (Herrich-Schaeffer)]. (Monobasic and designation of Ashmead, 1899, Canad. Entom., XXXI, p. 216.)

Cuphoterus Minkiewicz, 1934.[60] Polski Pismo Ent., XII, p. 254 & 256.

A *lapsus calami* or typographical error for *Cuphopterus* Morawitz, 1866, *q.v.*

[53] At the recent congress held in Lisbon, September, 1935, the International Commission on Zoological Nomenclature voted to conserve the name *Crabro* Fabricius, 1775 for the Sphecoid wasp genus and *Cimbex* Olivier, 1790 for the sawfly genus.

[54] *Vide* Pate, 1935, Ent. News, XLVI, p. 245.

[55] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 163), who is the authority for this synonymy, states that *Cratolarra femorata* Cameron, 1900 may be conspecific with *Sphex maura* Fabricius, 1787 [= *Larra maura* (F.)].

[56] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 167) is the authority for this synonymy.

[57] Westwood's designation in 1840 (p. 80) of *Crabro scutatus* F., as type is invalid since he specifically states this species is merely an example.

[59] Morawitz gives no exponent of this name on page 252 but in the list of species at the end of his paper places *Crabro* (*Blepharipus*) *subulatus* Dahlbom, 1845 in *Cuphopterus*.

[60] Minkiewicz (*l. c.*, p. 256) mentions *Crabro signatus* Panzer and *C. serripes* Panzer as exponents of *Cuphoterus*.

Dahlbomia Wissmann, 1849. Stettin. Ent. Ztg., x, p. 9.

Type: *Sphex atra* Fabricius, 1793 [= *Dahlbomia atra* (F.) = *Ps.* (*Psen*) *ater* (F.)]. (Monobasic.)

Isogenotypic with *Psen* Latreille, 1796 *Mesopora* Wesmael, 1852, and *Psenia* Kirby, 1829, *q.v.*

Dalara Ritsema, 1884. Le Naturaliste, II, p. 560.

Type: *Darala Schlegelii* Ritsema, 1884 [= *Dalara Schlegelii* (Ritsema)]. (Original designation and monobasic.)

Isogenotypic with *Darala* Ritsema, 1884 *nec* Walker, 1855, *q.v.*

Darala Ritsema, 1884 *nec* Walker, 1855. Notes Leyden Mus., VI, p. 54.

Type: *Darala Schlegelii* Ritsema [= *Dalara Schlegelii* (Ritsema)]. (Monobasic.)

Isogenotypic with *Dalara* Ritsema, 1884, *q.v.*

Dasyproctus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 801.

Type: *Dasyproctus bipunctatus* Lepeletier & Brullè [= *D.* (*Dasyproctus*) *bipunctatus* (Lepeletier & Brullè)]. (Monobasic.)

Deinomimesa Perkins, 1899. Faun. Hawaiiensis, I, 1, Hymen. Acul., p. 11. [Five species.]

Type: *Deinomimesa ferox* Perkins [= *Psen* (*Deinomimesa*) *ferox* (Perkins)]. (Present designation.)

Diamma Dahlbom, 1844 *nec* Westwood, 1835. Hymen. Europ., I, p. 225.

Type: *Diamma Spinolae* Dahlbom, 1844 [= *Cerceris binodis* Spinola, 1841 = *Didesmus binodis* (Spinola)]. (Monobasic.)

Isogenotypic with *Didesmus* Dahlbom, 1845, *q.v.*

Dicranorhina Shuckard, 1840.[61] Lardner's Cabinet Encyclopaed., VIII, p. 181. [No species]. 1912, Turner, Ann. & Mag. Nat. Hist., (8), IX, p. 199. [Four species.]

[61] Turner in 1912 (*loc. cit.*) called attention to the necessity of using Shuckard's 1840 name for *Piagetia* Ritsema, 1872, a point with which Rohwer after some discussion (1915, Proc. U. S. Nat. Mus., XLIX, p. 245; and 1917, *idem*, LIII, p. 173) finally agreed. Inasmuch as Turner in 1912 listed *Piagetia* Ritsema as a synonym of *Dicranorhina* Shuckard, I have assumed that the two species Ritsema placed in his genus may likewise be considered to be among the first placed in *Dicranorhina*. Furthermore, I have ventured to accept Bingham's fixation of type of *Piagetia* as valid for *Dicranorhina*. If, however, Bingham's fixation may not be accepted, then the next available designation is that of Williams (1928, Exp. Sta., Hawaiian Sugar Planters' Assn., Ent. Ser., Bull. 19, p. 86) who selected *Dicranorhina Ritsemae* (Ritsema) [= *Piagetia Ritsemae* Ritsema] as type of *Dicranorhina*. Should it eventually prove that neither of these designations is acceptable, since *Piagetia Ritsemae* Ritsema was not specifically mentioned by Turner in 1912, then as type of *Dicranorhina* Shuckard, 1840 I select here *Piagetia intaminata* Turner [= *Dicranorhina intaminata* (Turner)], a species mentioned by Turner in 1912.

TYPE: *Piagetia Ritsemae* Ritsema, 1872 [= *Dicranorhina Ritsemae* (Ritsema)]. (Designation of Bingham, 1897, Faun. Brit. Ind., Hymen., I, p. 210.)

Isogenotypic with *Piagetia* Ritsema, 1872, *q.v.*

Didesmus Dahlbom, 1845. Hymen. Europ., I, p. 502.

TYPE: *Diamma Spinolae* Dahlbom, 1844 [= (*Didesmus Spinolae* (Dahlbom) =) *Cerceris binodis* Spinola, 1841 = *Didesmus binodis* (Spinola)]. (Monobasic.)

Isogenotypic with *Diamma* Dahlbom, 1844 *nec* Westwood, 1835, *q.v.*

Didineis Wesmael, 1852. Bull. Acad. R. Sci. Belgique, XIX, p. 109.

TYPE: *Pompilus lunicornis* Fabricius, 1798 [= *Didineis lunicornis* (F.)]. (Monobasic.)

Dienoplus Fox, 1893.[62] Proc. Acad. Nat. Sci. Phila., XLV, p. 548.

TYPE: *Dienoplus pictifrons* Fox, 1893 [62] [= *Oryttus*? (*Dienoplus*) *pictifrons* (Fox)]. (Monobasic.)

Dimorpha Jurine, 1801.[63] [In Panzer,] Erlang. Litt. Ztg., I, p. 163.

TYPE: *Tiphia abdominalis* Panzer, 1798 [= (*Dimorpha abdominalis* (Panzer) =) *Sphex boops* Schrank, 1781 = *A.* (*Astata*) *boops* (Schrank)]. (Monobasic.)

Isogenotypic with *Astata* Latreille, 1796 and *Dimorpha* Panzer, 1806, *q.v.*

Dimorpha Panzer, 1806. Krit. Rev. Insektenf. Deutschl., II, p. 126.

TYPE: *Tiphia abdominalis* Panzer, 1798 [= (*Dimorpha abdominalis* (Panzer) =) *Sphex boops* Schrank, 1781 = *A.* (*Astata*) *boops* (Schrank)]. (Monobasic.)

Isogenotypic with *Astata* Latreille, 1796 and *Dimorpha* Jurine, 1801, *q.v.*

Dinetomorpha Gussakovskij, 1930.[64] Annu. Mus. Zool. Acad. Sci. URSS, XXXI, p. 451. [Two species.]

TYPE: *Gastrosericus* (*Dinetomorpha*) *flavicornis* Gussakovskij. (Present designation.)

Dinetus Jurine, 1801.[63] [In Panzer,] Erlang. Litt. Ztg., I, p. 164. [Two species.]

TYPE: *Crabro pictus* Fabricius, 1793 [= *Dinetus pictus* (F.)]. (Designation of Morice & Durrant, 1914, Trans. Ent. Soc. London, p. 412.)

Isogenotypic with *Dinetus* Panzer, 1806 and *Dinetus* Jurine, 1807.

Dinetus Panzer, 1806. Krit. Rev. Insektenf. Deutschl., II, p. 192. [Two species.]

[62] I have seen no authentic material of *Sphex concinna* Rossi, 1790, the type of *Oryttus* Spinola, 1836, but from what I can gather from the papers of European authors, *Dienoplus pictifrons* Fox, 1893 agrees with this species in all essential respects save for the venation of the hind wing. Consequently, at present I consider *Dienoplus* Fox, 1893 tentatively as a subgenus of *Oryttus* Spinola, 1836.

[63] At the recent congress held in Lisbon, the International Commission on Zoological Nomenclature voted to suppress the "Erlangen List." See discussion of this name in Appendix I under the name *Dimorpha*, Panzer, 1806.

[64] *Vide* footnote 83 on *Gastrosericus* Spinola, 1839.

TYPE: *Pompilus pictus* Fabricius, 1798 [65] [= *Crabro pictus* Fabricius, 1793 [66] = *Dinetus pictus* (F.)]. (Designation of Latreille,[65] 1810, p. 438.)

Isogenotypic with *Dinetus* Jurine, 1801 and 1807, *q.v.*

Dinetus Jurine, 1807. Nouv. Méthod. Class. Hymén., p. 207.

TYPE: *Crabro pictus* Fabricius, 1793 [= *Dinetus pictus* (F.)]. (Monobasic.)

Isogenotypic with *Dinetus* Jurine, 1801 and *Dinetus* Panzer, 1806, *q.v.*

Dineurus Westwood, 1837.[67] Mag. Nat. Hist., (N. S.), I, p. 173.

TYPE: *P[emphredon] unicolor* Lat[reille, 1809] [= (*Pemphredon* (*Dineurus*) *unicolor* [Panzer]) = *Cemonus*, 2 fam., Jurine, 1807 (*i.e.*, *Sphex unicolor* Jurine, 1807) = *Pelopoeus unicolor* Fabricius, 1805 = *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787 = *Cemonus rugifer* Dahlbom, 1844 [68] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Original designation.)

Isogenotypic with *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1801 and 1807, *Diphlebus* Westwood, 1840 and *Chevrieria* Kohl, 1883 *nec* O. Heer, 1839, *q.v.*

Diodontus Curtis, 1834. Brit. Ent., XI, Fol. 496. [Three species.]

TYPE: *Psen pallipes* Panzer, 1806 [69] [= (*Diodontus pallipes* (Panzer) =) *Sphex pallipes* Panzer, 1798 [70] = ? *Trypoxylon atratum* Fabricius, 1805 = *D.* (*Diodontus*) *atratus* (F.)]. (Original designation.)

Isogenotypic with *Neofoxia* Viereck, 1901, *q.v.*

[65] Panzer (*op. cit.*, p. 193) states that he has frequently taken *Pompilus pictus* [F.] [= *Crabro pictus* F., 1793] and *P. guttatus* [F.] [= *Sphex guttata* F., 1793] in copula; consequently it might be maintained that *Dinetus* Panzer, 1806 is virtually monobasic.

[66] *Crabro pictus* Fabricius, 1793 (Ent. Syst., II, p. 299) and *Sphex guttata* Fabricius, 1793 (Ent. Syst., II, p. 215) are merely opposite sexes of the same species and consequently the former should be listed as a synonym of the latter inasmuch as *Sphex guttata* has page priority. Dalla Torre has done this in his Catalogus Hymenopterorum. However, inasmuch as both were proposed in the same work, and since *Crabro pictus* [= *Dinetus pictus*] has been the name generally used by authors, it may be retained as the valid one for this species (*v.* Art. 28, Internat. R. Zool. Nomencl.).

[67] *Vide* discussion of this name under *Cemonus* Panzer, 1806 in Appendix I.

[68] Bluthgen (1931, Konowia, X, pp. 121–129) is the authority for this synonymy.

[69] Shuckard in 1837 (Essay Indig. Foss. Hymen., p. 184) gives *Pemphredon tristis* Van der Linden, 1829 as the genotype of *Diodontus*, accepting the statement Curtis made in 1837 (Brit. Ent., XIV, 632) that ". . . I have separated at Folio 496 under the name *Diodontus* . . . the type [of] which, it must be remembered is the *P[emphredon] tristis* of Van der Linden [1829], and is presumed to be synonymous with Panzer's *Psen pallipes*. . . ." Curtis' statement was accepted and the name *Diodontus* was universally used by authors for the group represented by *Pemphredon tristis* Van der Linden, 1829 until Rohwer in 1915 (Proc. U. S. Nat. Mus., XLIX, p. 243) called attention to the fact that this usage was, in a measure, contrary to Opinion 65, restored the name *Diodontus* to the group represented by *Psen pallipes* Panzer, 1806 [= *Sphex pallipes* Panzer, 1798 = ? *Trypoxylon atratum* Fabricius, 1805], and proposed the new genus *Xylocelia* which is now used for *Diodontus* Auctt., *nec* Curtis, 1834.

[70] On the identity of *Sphex pallipes* Panzer, 1798, see Richards, 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 166; *v. et.*, Hartig, 1931, Stettin. Ent. Ztg., XCII, p. 203–210.

Diphlebus Westwood, 1840.[67] Intro. Mod. Class. Insects, II, Synops. Gen. Brit. Insects, p. 81. [Two species.]

TYPE: *Pelop*[*oeus*] *unicolor* Fabr[icius, 1805]. Nec Jurine [,1807] [= (*Diphlebus unicolor* [Fabricius]) = *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787 = *Cemonus rugifer* Dahlbom, 1844 [68] = *Pemphredon* (*Cemonus*) *rugifer* (Dahlbom)]. (Original designation.)

Isogenotypic with *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1801 and 1807, *Dineurus* Westwood, 1837, and *Chevrieria* Kohl, 1883 *nec* O. Heer, 1839, *q.v.*

Diploplectron Fox, 1893. Trans. Amer. Ent. Soc., XX, p. 38.

TYPE: *Liris ? brunneipes* Cresson, 1881 [= *Diploplectron brunneipes* (Cresson)]. (Monobasic.)

Dolichocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 216.

TYPE: *Dolichocrabro Wickhamii* Ashmead,[71] [1902] [= *Crabro* (*Crossocerus*) *Wickhamii* (Ashmead)]. (Original designation and monobasic.)

Dolichurus Latreille, 1809. Gen. Crust. Insect., IV, p. 387.

TYPE: *Pompilus corniculus* Spinola, 1808 [= *Dolichurus corniculus* (Spinola)]. (Monobasic and designation of Latreille, 1810, p. 438.)

Dremocharas Gussakovskij, 1928. Bull. Inst. Zool. Appliq. Phytopath., Leningrad, IV, p. 6.

A typographical error or *lapsus calami* for *Eremochares* Gribodo, 1882. *q.v.*

Dryudella Spinola, 1843. Ann. Soc. Ent. France, (2), I, p. 135.

TYPE: *Dryudella Ghilianii* Spinola, 1843 [= *Astata* (*Dryudella*) *tricolor* [Van der Linden, 1829] var. *Ghilianii* (Spinola)]. (Monobasic.)

Dumonela Reed, 1894. An. Univ. Chile, LXXXV, p. 608.

TYPE: *Monedula sericea* Spinola, 1851 [72] [= ? *Bembex variegata* Olivier, 1789 = *Bicyrtes variegata* (Olivier)]. (Original designation and monobasic.)

Dynatus Lepeletier, 1845. Hist. Nat. Insect., Hymen., III, p. 332.

TYPE: *Dynatus Spinolae* Lepeletier, 1845 [= *Podium nigripes* Westwood, 1832 = *Podium* (*Dynatus*) *nigripes* (Westwood)]. (Monobasic.)

Isogenotypic with *Stethorectus* Smith, 1847, *q.v.*

[71] Ashmead did not describe *Dolichocrabro Wickhamii* fully until 1902 in the Harriman Alaska Report (1902, Proc. Washington Acad. Sci., IV, p. 133).

[72] The precise identity of *Monedula sericea* Spinola, 1851 is somewhat doubtful. Handlirsch (1889, Sitzber. Akad. Wissen. Wien, XCVIII, p. 488) regards it as conspecific with *Bembex variegata* Olivier, 1789 in one place and also as doubtfully conspecific with *Bembidula discisa* Taschenberg, 1870 in another place. Should it eventually prove to be the correct name for the latter, then *Dumonela* Reed, 1894 would be isogenotypic with *Bembidula* Burmeister, 1874. Nevertheless, whatever may be the outcome, *Dumonela* as described by Reed is a *Bicyrtes*. Parker in his review of the Bembicines (1929, Proc. U. S. Nat. Mus., LXXV, art. 5) gives no indication that he was aware of Reed's name *Dumonela* nor of Spinola's *Monedula sericea*!

Dyscolocrabro Kohl, 1915. Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 138.

TYPE: *Crabro* (*Thyreopus Dyscolocrabro*) *chalybeus* Kohl [= *C.* (*Crabro Dyscolocrabro*) *chalybeus* (Kohl)]. (Monobasic.)

Ectemenius Marschall, 1873. Nomen. Zool., p. 260.

Typographical error or *lapsus calami* for *Ectemnius* Dahlbom, 1845, *q.v.*

Ectemnius Dahlbom, 1845.[73] Hymen. Europ., I, p. 389. [Five species.]

TYPE: *Crabro guttatus* Van der Linden, 1829 [73a] [= *Crabro* (*Ectemnius*) *guttatus* (Van der Linden) = *Crabro* (*Ectemnius Ectemnius*) *guttatus* (Van der Linden)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 168.)

Isogenotypic with *Mesocrabro* Verhoeff, 1892, *q.v.*

Editha Parker, 1929. Proc. U. S. Nat. Mus., LXXV, art. 5, p. 17. [Four species.]

TYPE: *Monedula magnifica* Perty, 1833 [= *Editha magnifica* (Perty)]. (Original designation.)

Enchemicrum Pate, 1929. Ent. News, XL, p. 219.

TYPE: *Enchemicrum australe* Pate. (Original designation and monobasic.)

Encopognathus Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 486.

TYPE: *Crabro* (*Encopognathus*) *Braueri* Kohl [= *E.* (*Encopognathus*) *Braueri* (Kohl)]. (Monobasic.)

Enodia Dahlbom, 1844 *nec* Hübner, 1818. Hymen. Europ., I, p. 28 & 438. [Two species.]

TYPE: *Sphex albisecta* Lepeletier & Serville, 1828 [= *Enodia albisecta* (Lepeletier & Serville) = *Ammophila ? Kirbii* Van der Linden, 1827 = *Prionyx Kirbii* Van der Linden, 1827 = *Chlorion* (*Prionyx*) *Kirbii* (Van der Linden)]. (Designation of Kohl, 1885, Termész. Füzet., IX, p. 164.)

Isogenotypic with *Prionyx* Van der Linden, 1827 and *Parasphex* Smith, 1856, *q.v.*[74]

Enoplolindenius Rohwer, 1911. Proc. U. S. Nat. Mus., XL, p. 562.

TYPE: *Lindenius* (*Enoplolindenius*) *clypeatus* Rohwer. (Original designation and monobasic.)

[73] *Vide* footnote 208 under *Solenius* Lepeletier & Brullè.

[73a] The precise identity of *Crabro guttatus* Van der Linden, 1829 is a moot point. Kohl (1915, Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 99) indicates that it may be conspecific with *Crabro spinicollis* Herrich-Schaeffer, 1841.

[74] For a discussion of this synonymy, see Pate, 1935, Ent. News, XLVI, pp. 250, 264–265.

Entomocrabro Kohl, 1905. Verh. Zool.-Bot. Ges. Wien, LV, p. 356.

TYPE: *Crabro* (*Entomocrabro*) *Dukei* Kohl [= *Entomocrabro Dukei* (Kohl)]. (Monobasic.)

Entomognathus Dahlbom, 1844. Hymen. Europ., I, p. 295.

TYPE: *Crabro brevis* Van der Linden, 1829 [= *Entomognathus brevis* (Van der Linden)]. (Monobasic.)

Entomosericus Dahlbom, 1845.[75] Hymen. Europ., I, p. 486.

TYPE: *Entomosericus concinnus* Dahlbom. (Monobasic.)

Eopsenulus Gussakovskij, 1934. Mushi, VII, p. 85.

TYPE: *Psenulus* (*Eopsenulus*) *iwatai* Gussakovskij [= *Diodontus* (*Eopsenulus*) *iwatai* (Gussakovskij)]. (Original designation and monobasic.)

Eparmostethus Kohl, 1907.[76] Verh. Zool.-Bot. Ges. Wien, LVII, p. 167.

TYPE: *Eparmostethus madecassus* Kohl [= *Gastrosericus madecassus* (Kohl)]. (Monobasic.)

Epibembex Minkiewicz, 1934. Polski Pismo Ent., XII, p. 254. [Ten species.]

TYPE: *Apis rostrata* Linnaeus, 1758 [= *Bembex* (*Epibembex*) *rostrata* (L.) = *Bembix rostrata* (L.)]. (Present designation.)

Isogenotypic with *Bembix* Fabricius, 1775, *Bembyx* Fabricius, 1775 and *Bembex* Fabricius, 1777, *q.v.*

Epicrossocerus Ashmead, 1899. Canad. Entom., XXXI, p. 215.

TYPE: *Crabro insolens* Fox, 1895 [= *Epicrossocerus insolens* (Fox) = *Crabro* (*Crossocerus Blepharipus*) *insolens* (Fox)]. (Original designation and monobasic.)

Epinysson Pate, 1935.[77] Ent. News, XLVI, p. 250.

TYPE: *Nysson basilaris* Cresson, 1882 [= *Nysson* (*Epinysson*) *basilaris* (Cresson)]. (Original designation.)

Epiphilanthus Ashmead, 1899. Canad. Entom., XXXI, p. 294. [Two species.]

TYPE: *Philanthus solivagus* Say, 1837 [= *Epiphilanthus solivagus* (Say) = *Philanthus solivagus* Say]. (Original designation.)

Eremiasphecium Kohl, 1897.[78] Ann. K. K. Naturhist. Hofmus., Wien, XII, p. 67.

TYPE: *Eremiasphecium Schmiedeknechtii* Kohl. (Monobasic.)

[75] No description or characterization of this genus nor of the sole included species is given on page 486, but Dahlbom characterizes it in his Tabula Examinationis Synoptica Generis Mellinidarum, spelling it there, however, *Enthomosericus*. Save for Radoszkowski (1877, Fedtschenko, Reise in Turkestan, II, Sphegid., pp. 33 & 46) who employed this latter orthography, all later authors have used the spelling given on page 486, considering the latter one a typographical error, a contention which I believe is well founded inasmuch as on page 486 the sole included species is given as *Entomericus concinnus*. From an etymological standpoint *Entomosericus* is correct.

[76] *Vide* footnote 83 on *Gastrosericus* Spinola.

[77] Proposed for *Brachystegus* Auctt., *nec* A. Costa, 1859. *Cf.* footnote 25 under *Bathystegus* Rohwer.

[78] *Vide* Pate, 1935, Ent. News, XLVI, p. 249.

Eremochares Gribodo, 1882. Ann. Mus. Stor. Nat. Genova, XVIII, p. 265.

TYPE: *Eremochares Doriae* Gribodo, 1882 [= *Ammophila dives* Brullè, 1832 = *Sphex* (*Eremochares*) *dives* (Brullè)]. (Monobasic.)

Eucerceris Cresson, 1865. Proc. Ent. Soc. Philadelphia, v, p. 104. [Seven species.]

TYPE: *Eucerceris fulvipes* Cresson. (Present designation.)

Euplilis Risso, 1826. Hist. Nat. Europ. Merid., v, p. 227. [Two species.]

TYPE: *Crabro rufiventris* Panzer, 1799 [= *Euplilis rufiventris* (Panzer) = *Sphex clavipes* Linnaeus, 1758 = *Euplilis clavipes* (L.)]. (Designation of Pate, 1935, Ent. News, XLVI, p. 246.)

Isogenotypic with *Rhopalum* Kirby, 1829, *Physoscelus* Lepeletier & Brullè, 1835, and *Physoscelis* Westwood, 1840, *q.v.*

Euspongus Lepeletier, 1832. Ann. Soc. Ent. France, I, p. 56a & 66. [Three species.]

TYPE: *Euspongus laticinctus* Lepeletier [= *G.* (*Gorytes*) *laticinctus* (Lepeletier)]. (Designation of Westwood, 1840, p. 80.)

Euzonia Kirby MS, 1829.[79] [In Stephens,] Syst. Catal. Brit. Insects, p. 363. [Five species?]

TYPE: *Mellinus quinquecinctus* Fabricius, 1793 [= *G.* (*Gorytes*) *quinquecinctus* (F.)]. (Present designation.)

Isogenotypic with *Gorytes* Latreille, 1804 and *Hoplisus* Lepeletier, 1832, *q.v.*

Exeirus Shuckard, 1838. Trans. Ent. Soc. Lond., II, p. 71.

TYPE: *Exeirus lateritius* Shuckard. (Monobasic.)

Exirus Schulz, 1906.[80] Spolia Hymenopterologica, p. 199.

Emendation for, and isogenotypic with *Exeirus* Shuckard, 1838, *q.v.*

Fertonius Perez, 1892. [In Ferton,] Act. Soc. Linn. Bordeaux, XLIV, p. 341. [Two species.] [81]

TYPE: *Crossocerus luteicollis* Lepeletier & Brullè, 1835 [= *Fertonius luteicollis* (Lepeletier & Brullè) = *Crabro quinquenotatus* Jurine, 1807 = *Tracheliodes quinquenotatus* (Jurine)]. (Present designation.) [81]

[79] Stephens places Kirby's name as a synonym of *Gorytes* Latreille.

[80] Agassiz in 1846 in the Nomenclator Zoologicus was actually the first to emend *Exeirus* to this spelling.

[81] Perez gave two species as exponents of *Fertonius: Crabro luteicollis* Lepeletier & Brullè, 1835 and *Crabro bucephalus* Smith, 1856, the latter of which he believed was the same as *C. luteicollis* L. & Br. Thus *Fertonius* might be regarded as virtually monobasic. Both Lepeletier and Brullè's, and Smith's species are synonyms of *Crabro quinquenotatus* Jurine, 1807.

Foxia Ashmead, 1898. Ent. News, IX, p. 187.

TYPE: *Foxia pacifica* Ashmead. (Monobasic.)

Gasterosericeus Sherborn, 1926. Index Animal., pt. XI, p. 2638. [No species.]

A typographical error or *lapsus calami* for *Gasterosericus* Dahlbom, 1845, *q.v.*

Gasterosericus Dahlbom, 1845.[82] Hymen. Europ., I, p. 467. [Two species.]

TYPE: *Gasterosericus Waltlii* Dahlbom, 1845 [= *Gastrosericus Waltlii* Spinola, 1839]. (Present designation.)

Isogenotypic with *Gastrosericus* Spinola, 1839, *q.v.*

Gastrargyron Gussakovskij, 1930.[83] Annu. Mus. Zool. Acad. Sci. URSS, XXXI, p. 451. [Two species.]

TYPE: *Gastrosericus* (*Gastrargyron*) *marginalis* Gussakovskij. (Present designation.)

Gastrosericus Spinola, 1839.[83] Ann. Soc. Ent. France, VIII, p. 480.

TYPE: *Gastrosericus Waltlii* Spinola. (Monobasic and original designation [*v.* Opinion 7]).

Isogenotypic with *Gasterosericus* Dahlbom, 1845, *q.v.*

Gastrosphaeria A. Costa, 1858. Faun. Regn. Napoli, Imenotteri, Aculeati: Sphecidea, p. 10.

TYPE: *Gastrosphaeria anthracina* A. Costa, 1858 [= *Sphex subfuscatus* Dahlbom, 1845 = *Chlorion* (*Prionony*x) *subfuscatum* (Dahlbom)]. (Monobasic.)

Gonioxybelus Minkiewicz, 1934. Polski Pismo Ent., XII, p. 251. [Four species.]

TYPE: *Oxybelus nigripes* Olivier, 1812 [= *Oxybelus* (*Gonioxybelus*) *nigripes* (Olivier) = *Oxybelus nigripes* Olivier]. (Present designation.)

Gonius Jurine, 1801.[84] [In Panzer,] Erlang. Litt. Ztg., I, p. 164. [Nomen nudum.]

Gonius Panzer, 1806.[84] Krit. Rev. Insektenf. Deutschl., II, p. 176.

TYPE: *Philanthus flavipes* Fabricius, 1793 [= *Crabro flavipes* F., 1781 = *Tiphia variegata* F., 1781[85] = *Palarus variegatus* (F.)]. (Monobasic.)

Isogenotypic with *Gonius* Jurine, 1807, *q.v.*

[82] A typographical error or *lapsus calami* for *Gastrosericus* Spinola, 1839.

[83] Arnold (1922, Ann. Transvaal Mus., IX, p. 114, and 1927, *idem*, XII, p. 116) considers that *Parallelopsis* Maidl, 1915, and *Eparmostethus* Kohl, 1907 are congeneric with *Gastrosericus*, and refuses even to consider them worthy of subgeneric rank. Recently, Gussakovskij has divided *Gastrosericus* into three subgenera, *viz: Gastrosericus* (*s. s.*), *Gastrargyron* and *Dinetomorpha*, but when a careful study is made of all the species of this genus, the two latter names proposed by Gussakovskij very probably may prove to be congeneric with Kohl's and Maidl's groups which it may be possible to retain as subgenera.

[84] *Vide* discussion of this name in Appendix I.

Gonius Jurine, 1807.[84] Nouv. Méthod. Class. Hymén., p. 203.

TYPE: *Philanthus flavipes* Fabricius, 1793 [= *Tiphia variegata* F., 1781 [85] = *Palarus variegatus* (F.)]. (Monobasic.)

Isogenotypic with *Gonius* Panzer, 1806, *q.v.*

Gonostigmus Rohwer, 1911. Proc. U. S. Nat. Mus., XL, p. 559.

TYPE: *Gonostigmus typicus* Rohwer, 1911 [= ? *Stigmus temporalis* Kohl, 1892 = *Stigmus* (*Gonostigmus*) *temporalis* (Kohl)]. (Original designation and monobasic.)

Gorystizus Minkiewicz, 1934. Polski Pismo Ent., XII, p. 252. [Six species.]

TYPE: *Vespa tridens* Fabricius, 1781 [= *Stizus* (*Gorystizus*) *tridens* (F.) = *Stizomorphus tridens* (F.) = *Bembecinus tridens* (F.)]. (Present designation.)

Isogenotypic with *Stizomorphus* A. Costa, 1859, *q.v.*

Gorytes Latreille, 1804.[86] Nouv. Dict. Hist. Nat., XXIV, Tabl. Méthod., p. 180.

TYPE: *Mellinus quinquecinctus* Fabricius, 1793 [= *G.* (*Gorytes*) *quinquecinctus* (F.)]. (Monobasic.)

Isogenotypic with *Hoplisus* Lepeletier, 1832, and *Euzonia* Kirby, 1829, *q.v.*

Handlirschia Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 425.

TYPE: *Sphecius aethiops* Handlirsch, 1889 [= *Handlirschia aethiops* (Handlirsch)]. (Monobasic.)

Hapalomellinus Ashmead, 1899. Canad. Entom., XXXI, p. 300.

TYPE: *Gorytes eximius* Provancher, 1888 *nec* Smith, 1862 [= *Gorytes* (*Arpactus*) *albitomentosus* Bradley, 1920 = *Hapalomellinus albitomentosus* (Bradley)]. (Original designation.)

Harpactes Dahlbom, 1844 [87] *nec* Swainson, 1833. Hymen. Europ., I, p. 147. [Seven species.]

TYPE: *Harpactes laevis* Dahlbom [= *Mutilla laevis* Latreille, 1792 = *Oryttus* ? (*Dienoplus*) *laevis* (Latreille)]. (Present designation.)

Isogenotypic with *Arpactus* Jurine, 1807 *nec* Panzer, 1805 *nec* Panzer, 1806 and *Harpactus* Shuckard, 1837, *q.v.*

Harpactophilus Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 276.

Emendation for and isogenotypic with *Arpactophilus* Smith, 1863, *q.v.*

[85] Turner (1909, Ann. & Mag. Nat. Hist., (8), III, p. 484) is the authority for this synonymy.

[86] *Vide* note on this name in Appendix II.

[87] Inasmuch as Dahlbom accredits the name *Harpactes* to Shuckard, it may be regarded as a typographical error, a *lapsus calami* or even an emendation of *Harpactus* Shuckard, 1837.

Harpactopus Smith, 1856. Catal. Hymen. Brit. Mus., IV, p. 264. [Four species.]

TYPE: *Harpactopus crudelis* Smith, 1856 [= *Sphex Aegyptia* Lepeletier, 1845 *nec* Linnaeus, 1758 = *Sphex soror* Dahlbom, 1845 = *Chlorion* (*Prionony*x) *soror* (Dahlbom)]. (Designation of Patton, 1880, Proc. Boston Soc. Nat. Hist., XX, p. 384.)

Harpactostigma Ashmead, 1899. Canad. Entom., XXXI, p. 299.

TYPE: *Hoplisus velutinus* Spinola, 1851 [= *Harpactostigma velutinum* (Spinola)]. (Original designation.)

Harpactus Shuckard, 1837.[88] Essay Indig. Foss. Hymen., p. 221. [Three species.]

TYPE: *Arpactus formosus* Jurine, 1807 [= *Mutilla laevis* Latreille, 1792 = *Oryttus*? (*Dienoplus*) *laevis* (Latreille)]. (Original designation.)[89]

Isogenotypic with *Arpactus* Jurine, 1807 *nec* Panzer, 1805 *nec* Panzer, 1806 and *Harpactes* Dahlbom, 1844, *q.v.*

Heliocausus Kohl, 1892. Ann. K. K. Naturhist. Hofmus., Wien, VII, p. 210.

TYPE: *Heliocausus Fairemairei* Kohl, 1892 [= *Arpactus ? larroides* Spinola, 1851 [90] = *Heliocausus larroides* (Spinola)]. (Monobasic.)

Isogenotypic with *Pseudolarra* Reed, 1894, *q.v.*

Helioryctes Smith, 1856. Catal. Hymen. Brit. Mus., IV, p. 358.

TYPE: *Helioryctes melanopyrus* Smith [=*P.* (*Paranysson*) *melanopyrus* (Smith)].[91] (Monobasic.)

Hemichalybion Kohl, 1918. Ann. K. K. Naturhist. Hofmus., Wien, XXXII, p. 79. [Three species.]

TYPE: *Pelopoeus Eckloni* Dahlbom, 1845 [= *Sceliphron* (*Hemichalybion*) *Eckloni* (Dahlbom)]. (Present designation.)

Hemithyreopus Kohl, 1915. Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 138. [Three species.]

TYPE: *Crabro* (*Ceratocolus*) *Loewi* Dahlbom, 1845 [= *Crabro* (*Thyreopus Hemithyreopus*) *Löwi* (Dahlbom) = *C.* (*Crabro Hemithyreopus*) *Loewi* (Dahlbom)]. (Present designation.)

[88] *Harpactus* was an emendation by Shuckard for *Arpactus* Jurine, 1807.

[89] If Shuckard's designation may not be considered valid then the next available one is that of Taschenberg who (Zeitschr. f. d. ges. Naturwissen., Halle, 1875, (N. F.), XI, p. 370) fixed the type of *Harpactus* as *H. laevis* [= [*Mutilla*] *laevis* Latreille].

[90] Herbst (1921, Stettin. Ent. Ztg., LXXXII, p. 115) is the authority for this synonymy.

[91] Turner (1914, Ann. & Mag. Nat. Hist., (8), XIV, p. 338) is the authority for this synonymy.

Heroecus Verhoeff, 1890. Entom. Nachr. XVI, 383. [No species.]

TYPE: *Pemphredon insignis* Van der Linden, 1829 [= *Passaloecus* (*Heroecus*) *insignis* (Van der Linden) = *P.* (*Passaloecus*) *insignis* (Van der Linden)]. (Present designation.)

Isogenotypic with *Passaloecus* Shuckard, 1837 and *Xyloecus* Shuckard, 1837 *nec* Serville, 1833, *q.v.*

Hingstoniola Turner & Waterston, 1926. Ann. & Mag. Nat. Hist., (9), XVII, p. 189.

TYPE: *Crabro* (*Hingstoniola*) *duplicata* Turner & Waterston. (Monobasic.)

Hogardia Lepeletier, 1845. Hist. Nat. Insect., Hymen., III, p. 288. [Two species.]

TYPE: *Hogardia rufescens* Lepeletier, 1845 [= *Stizus Hogardi* Latreille, 1809 = *S.* (*Sphecius*) *Hogardi* (Latreille)]. (Virtual tautonymy.)

Holcorhopalum Cameron, 1904.[92] Trans. Amer. Ent. Soc., XXX, p. 264.

TYPE: *Holcorhopalum foveatum* Cameron. (Monobasic.)

Hologambrus Morice, 1897.[93] Trans. Ent. Soc. Lond., 1897, p. 309.

Lapsus calami or typographical error for *Homogambrus* Kohl, 1889, *q.v.*

Holotachytes Turner, 1917. Ann. & Mag. Nat. Hist., (8), XX, p. 10.

TYPE: *Tachytes dichroa* Smith, 1856 [= *Tachytes* (*Holotachytes*) *dichroa* (Smith)]. (Original designation and monobasic.)

Homogambrus Kohl, 1889.[94] Ann. K. K. Naturhist. Hofmus., Wien, IV, p. 191.

TYPE: *Tachysphex* (*?*) *globiceps* Morawitz, 1889 [= *Homogambrus globiceps* (Morawitz)]. (Monobasic.)

Hoplisidia Cockerell, 1906. Bull. Mus. Comp. Zool., Harvard Coll., L, p. 47.

TYPE: *Hoplisidia kohliana* Cockerell.[95] (Monobasic.)

Hoplisoides Gribodo, 1884.[96] Boll. Ent. Soc. Ital., XVI, p. 276.

TYPE: *Hoplisoides intricans* Gribodo [= *H.* (*Hoplisoides*) *intricans* Gribodo]. (Monobasic.)

[92] Kohl (1915, Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 328), following Brauns' suggestion, regards *Holcorhopalum* as congeneric with *Dasyproctus* Lepeletier & Brullè, 1835.

[93] Only one species—*Hologambrus sericans* Morice—is used in connection with this name.

[94] Gussakovskij (1933, Rev. Ent. URSS, XXV, p. 154) considers *Homogambrus* Kohl a subgenus of *Prosopigastra* A. Costa, 1867.

[95] Fossil: Miocene, Florissant, Colorado.

[96] *Vide* Pate, 1936, Trans. Amer. Ent. Soc., LXII, pp. 50–52.

Hoplisus Lepeletier, 1832. Ann. Soc. Ent. France., I, 56a & 61. [Three species.]

TYPE: *Mellinus quinquecinctus* Fabricius, 1793 [= *Hoplisus quinquecinctus* (F.) = *G.* (*Gorytes*) *quinquecinctus* (F.)]. (Designation of Westwood, 1840, p. 80.)

Isogenotypic with *Gorytes* Latreille, 1804, and *Euzonia* Kirby, 1829, *q.v.*

Hoplocrabro Thomson, 1874. Hymen. Scandinav., III, pp. 262 & 277.

TYPE: *Crabro quadrimaculatus* Fabricius, 1793 [= *Crabro* (*Hoplocrabro*) *quadrimaculatus* (F.) = *Crabro* (*Crossocerus Hoplocrabro*) *quadrimaculatus* (F.)]. (Monobasic.)

Hoplocrabron De Stefani, 1886. Naturalista Siciliana, VI, p. 60.

TYPE: *Hoplocrabron Marathroicus* De Stefani [97] [= *A.* (*Ammoplanus*) *Marathroicus* (De Stefani)]. (Monobasic.)

Hylocrabro Perkins, 1902. Trans. Ent. Soc. Lond., 1902, p. 147.

TYPE: *Crabro* (*Solenius*) *tumidoventris* Perkins, 1899 [= *Hylocrabro tumidoventris* (Perkins) = *Crabro* (*Ectemnius Hylocrabro*) *tumidoventris* (Perkins)]. (Original designation.)

Hyloliris Williams, 1919. Exp. Sta., Hawaiian Sugar Planters' Assn., Ent. Ser., Bull. 14, p. 49.

TYPE: *Hyloliris mandibularis* Williams. (Original designation and monobasic.)

Hypocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 168. [Two species.]

TYPE: *Crabro decemmaculatus* Say, 1823 [= *Hypocrabro decemmaculatus* (Say) = *Crabro* (*Ectemnius Hypocrabro*) *decemmaculatus* (Say)]. (Original designation.)

Hypomellinus Ashmead, 1899. Canad. Entom., XXXI, p. 299.

TYPE: *Gorytes rufocinctus* Fox, 1895 [= *Hypomellinus rufocinctus* (Fox) = *Lestiphorus rufocinctus* (Fox)].[98] (Original designation and monobasic.)

Hypomiscophus Cockerell, 1898.[99] Ann. & Mag. Nat. Hist., (7), II, p. 321.

TYPE: *Miscophus* (*Hypomiscophus*) *arenarum* Cockerell [= *Hypomiscophus arenarum* (Cockerell) = *Nitelopterus arenarum* (Cockerell)]. (Monobasic.)

Hyponysson Cresson, 1882. Trans. Amer. Ent. Soc., IX, p. 273.

TYPE: *Nysson* (*Hyponysson*) *bicolor* Cresson. (Monobasic.)

[97] *Vide* Gussakovskij, 1931, Bol. R. Soc. Espan. Hist. Nat., XXXI, p. 456.

[98] Pate (1936, Trans. Amer. Ent. Soc., LXII, p. 50) is the authority for this synonymy.

[99] *Vide* Cockerell, 1899, Ent. News, X, p. 40; *v. et.* Bridwell, 1920, Proc. Hawaiian Ent. Soc., IV, p. 393; *v. et.* footnote 143 on *Nitelopterus* Ashmead, 1897.

Hypothyreus Ashmead, 1899. Canad. Entom., XXXI, p. 171.

TYPE: *Crabro subterraneus* Fabricius, 1775 [= *Hypothyreus subteranneus* (F.) = *Crabro* (*Ceratocolus*) *subterraneus* (F.) = *Crabro* (*L. Lestica*) *subterraneus* (F.)]. (Original designation.)

Isogenotypic with *Lestica* Billberg, 1820, *q.v.*

Icuma Cameron, 1905. Entomologist, XXXVIII, p. 21.

TYPE: *Icuma sericea* Cameron. (Monobasic.)

Ischnolynthus Holmberg, 1902. An. Mus. Nac. Hist. Nat. Buenos Aires, (3), II, p. 472.

TYPE: *Ischnolynthus foveolatus* Holmberg [= *Crabro* (*Crossocerus*) *foveolatus* (Holmberg)].[100] (Monobasic.)

Isodontia Patton, 1880. Proc. Boston Soc. Nat. Hist., XX, p. 380. [Six species.]

TYPE: *Sphex philadelphica* Lepeletier, 1845[101] [= *Isodontia philadelphica* (Lepeletier) = *Chlorion* (*Isodontia*) *harrisi* Fernald, 1906]. (Original designation.)

Karossia Arnold, 1929. Ann. Transvaal Mus., XIII, p. 409.

TYPE: *Karossia Hessei* Arnold. (Monobasic and original designation.)

Kaufmannia Radoszkowski, 1877. [In Fedtschenko,] Reise in Turkestan, II, Sphegid., pp. 33 & 43.

TYPE: *Kaufmannia Maracandica* Radoszkowski. (Monobasic.)

Kohlia Handlirsch, 1895. Sitzber. Akad. Wiss. Wien, CIV, p. 950.

TYPE: *Kohlia cephalotes* Handlirsch. (Monobasic.)

Kohliella Brauns, 1910. Deutsch. Ent. Zeitschr., 1910, p. 668.

TYPE: *Kohliella alaris* Brauns. (Monobasic.)

Laphyragogus Kohl, 1889.[102] Ann. K. K. Naturhist. Hofmus., Wien, IV, p. 190.

TYPE: *Laphyragogus pictus* Kohl. (Monobasic.)

Lara[103] Drapiez, 1819. Ann. Gen. Sci. Phys., Bruxelles, I, p. 54.

TYPE: *Lara Jurinii* Drapiez, 1819 [= *Astata nitida* Spinola, 1805 = *Tachysphex nitida* (Spinola)]. (Monobasic.)

[100] Brèthes (1911, An. Mus. Nac. Hist. Nat. Buenos Aires, (3), XIII, p. 282) is the authority for this synonymy.

[101] *Vide* Fernald (1906, Proc. U. S. Nat. Mus., XXXI, p. 361) for a discussion of the synonymy of this species.

[102] *Vide* footnote 108 on *Leianthrena* Bingham, 1896.

[103] This orthography should be regarded as either a *lapsus calami* or a typographical error inasmuch as Drapiez gives the vernacular name as "*Larre*" and furthermore states in his introduction that ". . . Ce especes seront classées suivant la méthode publiée par Latreille . . ." (*i.e.* Genera Crustaceorum et Insectorum, 1806–09). Otherwise it will be necessary to use *Lara* Drapiez, 1819 for *Tachysphex* Kohl, 1883 since *Lara Jurinii* Drapiez is indubitably a *Tachysphex*.

Larra Fabricius, 1793. Ent. Syst., II, p. v, [No species]; p. 220. [Seven species.]

TYPE: *Larra ichneumoniformis* Fabricius, 1793 [= *Sphex anathema* Rossi, 1790 = *Larra anathema* (Rossi)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Larrada* Smith, 1856, and *Larrana* Rafinesque, 1815, *q.v.*

Larra Smith, 1856 *nec* Fabricius, 1793. Catal. Hymen. Brit. Mus., IV, p. 337. [Fifty-nine species.]

TYPE: *Sphex vespiformis* Fabricius, 1775 [= *Larra vespiformis* (F.) = *Stizus vespiformis* (F.)]. (Original designation.)

Isogenotypic with *Stizolarra* Saussure, 1887, *q.v.*

Larrada Smith, 1856. Catal. Hymen. Brit. Mus., IV, p. 273. [Sixty-four species.]

TYPE: *Sphex anathema* Rossi, 1790 [= *Larrada anathema* (Rossi) = *Larra anathema* (Rossi)]. (Original designation.) [104]

Isogenotypic with *Larra* Fabricius, 1793, *q.v.*

Larrada Patton, 1880 *nec* Smith, 1856. Proc. Boston Soc. Nat. Hist. XX, p. 391. [Nomen nudum.]

Larrana Rafinesque, 1815. Analyse de la Nature ou Tabl. Univ., p. 124. [No species.]

Proposed as a new name or an emendation for, and isogenotypic with *Larra* Fabricius, 1793, *q.v.*

Larraxena Smith, 1851.[105] Ann. & Mag. Nat. Hist., (2), VII, p. 30.

TYPE: *Larraxena princeps* Smith [= *Monomatium princeps* (Smith)]. (Monobasic.)

Isogenotypic with *Monomatium* Shuckard, 1840, *q.v.*

Larrophanes Handlirsch, 1907. Die Fossil Insekten, p. 888.

TYPE: *Larrophanes ophthalmicus* Handlirsch.[106] (Monobasic.)

Larropsis Patton, 1892. Ent. News, III, p. 90.

TYPE: *Larrada tenuicornis* Smith, 1856 [= *Larropsis tenuicornis* (Smith)]. (Original designation.)

Lautara Herbst, 1919.[107] Bol. Mus. Nac. Chile, XI, p. 217.

TYPE: *Lautara Jaffueli* Herbst. (Monobasic.)

[104] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 163) is wrong in attributing the first valid designation of a genotype of *Larrada* to Girard (1879, Traité Élém. d'Ent., II, p. 953). Although Smith did not as a rule specify any species as type of the genera he proposed, in this instance he very definitely states in his original description of *Larrada* on page 274 that *L[arrada] anathema* [(Rossi)] is the type.

[105] *Vide* Pate, 1935, Ent. News, XLVI, p. 246.

[106] Fossil: Upper Miocene, Gabbro, Italy.

[107] *Vide* footnote 209 on *Solierella* Spinola.

Leianthrena Bingham, 1896.[108] [In Kohl,] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 381.

TYPE: *Leianthrena Kohlii* Bingham [= ? *Laphyragogus Kohlii* (Bingham)]. (Original designation and monobasic.)

Isogenotypic with *Lianthrena* Bingham, 1897, *q.v.*

Leptolarra Cameron, 1900.[109] Ann. & Mag. Nat. Hist., (7), v, p. 29. [Three species.]

TYPE: *Leptolarra reticulata* Cameron, 1900 [= *Notogonia nigricans* Walker, 1871 var. *reticulata* (Cameron, 1900) nec *Notogonia reticulata* Saussure, 1892 = *Leptolarra nigricans* (Walker, 1871) var. *reticuloides* Richards, 1935 = *Motes* (*Leptolarra*) *nigricans* subsp. *reticuloides* (Richards)]. (Designation of Richards, 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 164.)

Lestica Billberg, 1820. Enumerat. Insect., p. 107.[110] [Eight species.]

TYPE: *Crabro subterraneus* Fabricius, 1775 [= *Lestica subterranea* (F.) = *Crabro* (*L. Lestica*) *subterraneus* (F.)]. (Designation of Rohwer, 1911, Psyche, XVIII, p. 154.)

Isogenotypic with *Hypothyreus* Ashmead, 1899, *q.v.*

Lestiphorus Lepeletier, 1832.[111] Ann. Soc. Ent. France, I, p. 56a & 70.

TYPE: *Crabro bicinctus* Rossi, 1792 [= *Lestiphorus bicinctus* (Rossi)]. (Monobasic.)

Lianthrena Bingham, 1897.[108] Faun. Brit. Ind., Hymen., I, p. 212.

TYPE: *Lianthrena Kohlii* Bingham, 1897 [= *Leianthrena Kohlii* Bingham, 1896 = ? *Laphyragogus Kohlii* (Bingham)]. (Original designation and monobasic.)

Isogenotypic with *Leianthrena* Bingham, 1896, *q.v.*

Lindenius Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 791. [Ten species.]

TYPE: *Crabro albilabris* Fabricius, 1793 [= *Lindenius albilabris* (F.)]. (Designation of Girard,[112] 1879, Trait. Élém. d'Ent., II, p. 937.)

Isogenotypic with *Chalcolamprus* Wesmael, 1852, *q.v.*

[108] Although I have seen no material of *Leianthrena*, I have no doubt but what it is congeneric with *Laphyragogus* Kohl, 1889 or is at most but a subgenus of it.

[109] *Vide* Richards' discussion (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 164) of this name and also remarks in Appendix III under the name *Motes* Kohl.

[110] I have not seen an original copy of Billberg's work but have relied upon Rohwer's digest of it (Psyche, 1911, XVIII, p. 153–55).

[111] *Vide* Pate, 1936, Trans. Amer. Ent. Soc., LXII, p. 50.

[112] Westwood's 1840 citation (p. 80) of *Lindenius albilabris* may not be construed as a valid type designation inasmuch as he specifically states that it is merely an example.

Liris Fabricius, 1805. Syst. Piezat., p. 227. [Thirteen species.]

TYPE: *Sphex aurata* Fabricius, 1787 [*nec* Linnaeus, 1758] [= (*Liris aurata* (F.) =) ? *Tachytes opulenta* Lepeletier, 1845 = *Liris opulenta* (Lepeletier)]. (Designation of Patton,[113] 1880, Proc. Boston Soc. Nat. Hist., XX, p. 386.)

Isogenotypic with *Lirisis* Rafinesque, 1815, *q.v.*

Lirisis Rafinesque, 1815. Analyse de la Nature ou Tabl. Univ., p. 124. [No species.]

Proposed as a new name or emendation for, and isogenotypic with *Liris* Fabricius, 1805.

Lirosphex Brèthes, 1913. An. Mus. Nac. Hist. Nat. Buenos Aires, XXIV, p. 150. [Two species.]

TYPE: *Tachysphex subpetiolatus* Brèthes, 1909 [= *Lirosphex subpetiolatus* (Brèthes)]. (Original designation.)

Lophocrabro Rohwer, 1916. Connecticut St. Geol. & Nat. Hist. Surv., Bull., 22, p. 667.

TYPE: *Crabro singularis* Smith, 1856 [= *Solenius* (*Lophocrabro*) *singularis* (Smith) = *Crabro* (*Ectemnius Lophocrabro*) *singularis* (Smith)]. (Original designation.)

Lorrheum W. Leach MS, 1837.[114] [In Shuckard,] Essay Indig. Foss. Hymen., p. 18.

TYPE: *Chlorion compressum* F[abricius, 1805] [= (*Lorrheum compressum* [F.]) = *Sphex compressa* Fabricius, 1781 = *A.* (*Ampulex*) *compressum* (F.)]. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 18, footnote.)

Isogenotypic with *Chlorampulex* Saussure, 1892, *q.v.*

Lyroda Say, 1837. Boston Journ. Nat. Hist., I, p. 372. [Two species.]

TYPE: *Lyroda subita* Say. (Designation of Patton,[115] 1880, Proc. Boston Soc. Nat. Hist., XX, p. 386.)

Lyrops Illiger, 1807.[117] [In Rossi,] Fauna Etrusca, II, p. 162.[116]

TYPE: *Andrena etrusca* Rossi, 1790 [= *Lyrops etrusca* (Rossi) = *Tachytes etruscus* (Rossi)]. (Monobasic.)

[113] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 164) has incorrectly attributed the selection of the type of this genus to Bingham, 1897.

[114] This name should, perhaps, be accredited to Shuckard, particularly inasmuch as he made the first actual mention of it in print, characterized Leach's manuscript name and designated a type for it.

[115] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 165) has incorrectly attributed the selection of the type of this genus to Bingham (1897, Faun. Brit. Ind., Hymen., I, p. 208).

[116] Sherborn in the Index Animalium gives the following reference as the original proposition of the name *Lyrops:* Illiger, 1807, Mag. f. Insektenk., VI, p. 195. Illiger in this reference merely makes the following remark: "*Lyrops* nob. Larra J[urine].", but

Lyrops Dahlbom, 1844 *nec* Illiger, 1807. Hymen. Europ., I, p. 132.

TYPE: *Tachytes* (*Lyrops*) *pagana* Dahlbom [= *Larra*? *pagana* (Dahlbom)].[118] (Monobasic.)

Megalomma [119] Smith, 1873 [120] *nec* Westwood, 1841. Ann. & Mag. Nat. Hist., (4), XII, p. 405. [Four species.]

TYPE: *Megalomma elegans* Smith [121] [= (*Gorytes elegans* (Smith, 1873) nec *Gorytes elegans* (Lepeletier, 1832) = *Gorytes procerus* Handlirsch, 1888) = *Megistommum elegans* (Smith)]. (Present designation.)

Isogenotypic with *Megistommum* Schulz, 1906, *q.v.*

Megalommus Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [Nomen nudum.] *v. Megalomma* Smith, 1873.

Megalopodium Schulz, 1906. Spolia Hymenopterologica, p. 202.

Emendation for, and isogenotypic with *Megapodium* Dahlbom, 1845, *q.v.*

Megalostizus Schulz, 1906. Spolia Hymenopterologica, p. 199.

Emendation for, and isogenotypic with *Megastizus* Patton, 1879, *q.v.*

Megapodium Dahlbom, 1844. Hymen. Europ., I, p. 295. [Two species.]

TYPE: *Megapodium Westermanni* Dahlbom [= *D.* (*Dasyproctus*) *Westermanni* (Dahlbom)].[122] (Present designation.)

on page 190 of this paper states ". . . die Namen von Jurine's System, bei dem ich aber nur die Kupfertafeln ohne den Text zu Rathe ziehn konnte. . . ." Jurine on plate 9, genus 9 of his Nouvelle Méthode gives as the only exponent of *Larra*, *L. etrusca* [Rossi], which in the text (p. 145), that had not apparently been published when Illiger wrote his review, he states is *Andrena etrusca* Rossi, [1790], which thus becomes the type of *Lyrops* Illiger by monotypy. Kohl who examined the Jurinean collection in the Geneva museum states (1882, Mitth. Schweiz. Ent. Ges., VI, p. 393) that *Larra etrusca* Jurine, 1807 is *Tachytes etrusca* (Rossi) [= *Andrena etrusca* Rossi, 1790].

[117] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 164) incorrectly credits Latreille with being the original describer of this genus (1809, Gen. Crust. Insect., IV, p. 71), although Latreille in this reference acknowledges Illiger as the original describer. In a like manner, he has fallen into the same error as Latreille did in 1810, in citing *Larra tricolor* Fabricius, 1805 [= *Sphex tricolor* Fabricius, 1793 *nec* Schrank, 1781] as type of *Lyrops*.

[118] Kohl (1884, Verh. Zool.-Bot. Ges. Wien, XXXIV, p. 246) is the authority for this synonymy.

[119] Rohwer (1921, Proc. U. S. Nat. Mus., LIX, p. 412) spells this *Magalomma* but this may be regarded as a characteristic *lapsus calami*.

[120] Smith proposed *Megalomma* for Shuckard's uncharacterized genus *Megalommus*, *q.v.*

[121] Smith states (*loc. cit.*) ". . . This species was intended by Shuckard for the type; but he never described it. . . ."

[122] Dahlbom (*op. cit.*, p. 510) acknowledges the fact that his genus *Megapodium* is congeneric with *Dasyproctus* Lepeletier, 1835.

Megastizus Patton, 1879.[123] Bull. U. S. Geol. Surv., v, p. 344. [Two species.]

TYPE: *Stizus brevipennis* Walsh, 1869 [= *Megastizus brevipennis* (Walsh) = *Stizus* (*Megastizus*) *brevipennis* (Walsh)]. (Original designation.)

Megistommum Schulz, 1906.[124] Spolia Hymenopterologica, p. 200.

TYPE: *Megalomma elegans* Smith, 1873 [= *Megistommum elegans* (Smith)]. (Present designation.)

Isogenotypic with *Megalomma* Smith, 1873 *nec* Westwood, 1841, *q.v.*

Melanocrabro Perkins, 1902. Trans. Ent. Soc. Lond., 1902, p. 147.

TYPE: *Crabro* (*Solenius*) *curtipes* Perkins, 1899 [= *Melanocrabro curtipes* (Perkins) = *Crabro* (*Ectemnius Melanocrabro*) *curtipes* (Perkins)]. (Original designation.)

Mellinogastra Ashmead, 1899.[125] Canad. Entom., XXXI, p. 300.

TYPE: *Gorytes mellinoides* Fox, 1895 [= *Mellinogastra mellinoides* (Fox) = *Lestiphorus mellinoides* (Fox)].[126] (Original designation and monobasic.)

Mellinus Fabricius, 1790. Skrivt. Naturhist. Selsk., Kjobnhavn, I, 1, p. 226. [Five species.]

TYPE: *Vespa arvensis* Linnaeus, 1758 [127] [= *Mellinus arvensis* (L.)]. (Designation of Curtis, 1836, Brit. Ent., XIII, p. 580.)

Mellinusterius Meunier, 1889. Le Naturaliste, XI, p. 24.

TYPE: *Mellinusterius aphidium* Meunier. (Monobasic.)

Mesocrabro Verhoeff, 1892. Ent. Nachr., XVIII, p. 70. [Four species.]

TYPE: *Crabro guttatus* Van der Linden, 1829 [(= ? *Crabro spinicollis* Herrich-Schaeffer, 1841) = *Crabro* (*Mesocrabro*) *guttatus* (Van der Linden) = *Crabro* (*E. Ectemnius*) *guttatus* (Van der Linden)]. (Present designation.)

Isogenotypic with *Ectemnius* Dahlbom, 1845, *q.v.*

Mesopalarus Brauns, 1899. Ann. K. K. Naturhist. Hofmus., Wien, XIII, p. 416.

TYPE: *Mesopalarus Mayri* Brauns [= *Paranysson* (*Mesopalarus*) *Mayri* (Brauns)].[128] (Monobasic.)

[123] *Vide* discussion of *Stizus* Latreille in Appendix II.

[124] Proposed in lieu of *Megalomma* Smith, 1873 *nec* Westwood, 1841.

[125] R. Lucas (1903, Arch. Naturg., LXVI², fasc. 2, p. 371) gives this as *Mellinogaster* but this may be regarded as a *lapsus calami*, an emendation, or a typographical error.

[126] Pate (1936, Trans. Amer. Ent. Soc., LXII, p. 50) is the authority for this synonymy.

[127] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 169) calls attention to the fact that *Vespa arvensis* L., 1758 is merely the opposite sex of *Sphex vaga* L., 1758. The latter has page priority but according to Article 28 of the rules of zoological nomenclature the name *arvensis* may continue to be used for this species.

[128] Arnold (1923, Ann. Transvaal Mus., X, p. 16) is the authority for this synonymy

Mesopora Wesmael, 1852. Bull. Acad. R. Sci. Belgique, XIX, p. 279.

TYPE: *Sphex atra* Fabricius, 1793 [= *Mimesa* (*Mesopora*) *atra* [F.] = *Ps.* (*Psen*) *ater* (F.)]. (Monobasic.)

Isogenotypic with *Psen* Latreille, 1796, *Dahlbomia* Wissmann, 1849, and *Psenia* Kirby, 1829, *q.v.*

Metacrabro Ashmead, 1899. Canad. Entom., XXXI, p. 169.

TYPE: *Crabro Kollari* Dahlbom, 1845 [= (*Metacrabro Kollari* (Dahlbom) =) *Crabro lituratus* Panzer, 1805 = *C.* (*Ectemnius Metacrabro*) *lituratus* (Panzer)]. (Original designation.)

Metanysson Ashmead, 1899. Canad. Entom., XXXI, p. 326.

TYPE: *Nysson solani* Cockerell, 1895 [= *Metanysson solani* (Cockerell)]. (Original designation and monobasic.)

Microbembex Patton, 1879. Bull. U. S. Geol. Surv., V, p. 364. [Three species.]

TYPE: *Bembex monodonta* Say, 1824 [= *Microbembex monodonta* (Say)]. (Original designation.)

Microcrabro Saussure, 1892. [In Grandidier,] Hist. Nat. Madagascar, XX, Hymen., p. 574.

TYPE: *Crabro* (*Microcrabro*) *micromegas* Saussure. (Monobasic.)

Microglossa Rayment, 1930 [129] *nec* Voigt [in Cuvier], 1831, *nec* A. Fauvel, 1865, *nec* Mulsant & Rey, 1874. Proc. Roy. Soc. Victoria, (N. S.), XLII, p. 212. [Three species.]

TYPE: *Microglossa longifrons* Rayment [= *Microglossella longifrons* (Rayment) = *Spilomena longifrons* (Rayment)]. (Original designation.)

Isogenotypic with *Microglossella* Rayment, 1935, *q.v.*

Microglossella Rayment, 1935.[129] A Cluster of Bees, pp. 16 & 634. [Three species.]

TYPE: *Microglossa longifrons* Rayment, 1930 [= *Microglossella longifrons* (Rayment) = *Spilomena longifrons* (Rayment)]. (Original designation.) [130]

Isogenotypic with *Microglossa* Rayment, 1930 *nec* Fauvel, 1865, *q.v.*

[129] Prof. T. D. A. Cockerell [*in litt.*] has called my attention to the genus of Australian bees which Rayment first described as *Microglossa* and then later changed to *Microglossella*, and inquired whether it might not be identical with the well known genus of Pemphredonines, *Spilomena*. An examination and study of Rayment's descriptions and excellent figures has convinced me that Professor Cockerell's conjecture is undubitably correct.

[130] Rayment cites only one species, *Microglossella longifrons*, in connection with the generic name in 1935. In the original proposition of the name in 1930, he gave this species as type and it thus *ipso facto* became type of *Microglossella* proposed in 1935 in lieu of the already thrice preoccupied *Microglossa*.

Microstigmus Ducke, 1907. Ann. Soc. Ent. France, LXXVI, p. 28.

TYPE: *Microstigmus theridii* Ducke. (Monobasic.)

Mimesa Shuckard, 1837. Essay Indig. Foss. Hymen., p. 228. [Three species.]

TYPE: *Trypoxylon equestre* Fabricius, 1805 [131] [= *Mimesa equestre* (F.) = *Psen* (*Mimesa*) *equestris* (F.)]. (Original designation.)

Isogenotypic with *Aporia* Wesmael, 1852, *q.v.*

Mimumesa Malloch, 1933. Proc. U. S. Nat. Mus., LXXXII, art. 26, p. 16. [Sixteen species.]

TYPE: *Psen niger* Packard, 1867 [= *Psen* (*Mimumesa*) *niger* (Packard)]. (Original designation.)

Miscophinus Ashmead, 1898.[132] Ent. News, IX, p. 187. [Three species.]

TYPE: *Miscophinus laticeps* Ashmead [= *Hypomiscophus laticeps* (Ashmead) = *Nitelopterus laticeps* (Ashmead)]. (Original designation.)

Miscophoides Brauns, 1896. [In Kohl,] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 448.

TYPE: *Miscophoides Handlirschii* Brauns. (Monobasic.)

Miscophus Jurine, 1801. [In Panzer,] Erlang. Litt. Ztg., I, p. 164. [Nomen nudum.]

Miscophus Jurine, 1807. Nouv. Méthod. Class. Hymén., p. 206.

TYPE: *Miscophus bicolor* Jurine. (Monobasic.)

Miscothyris Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [Nomen nudum.]

Miscothyris Smith, 1869.[133] Trans. Ent. Soc. Lond., 1869, p. 307.

TYPE: *Miscothyris thoracicus* Smith [= *C.* (*Clitemnestra*) *thoracica* (Smith)]. (Monobasic.)

Miscus Jurine, 1807.[134] Nouv. Méthod. Class. Hymen., p. 130. [No species.] Latreille, 1809, Gen. Crust. Insect., IV, p. 54. [Two species.]

TYPE: *Ammophila campestris* Latreille, 1809 [= *Miscus campestris* (Latreille) = *Sphex* (*Miscus*) *campestris* (Latreille)]. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 79.)

[131] *Vide* Richards' note (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 166) on the identity of *Trypoxylon equestre* F., 1805.

[132] *Vide* Cockerell, 1899, Ent. News, X, p. 40; *v. et.*, Bridwell, 1920, Proc. Hawaii. Ent. Soc., IV, p. 393; *v. et.*, footnote 143 on *Nitelopterus* Ashmead, 1897.

[133] Kohl (1896, Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 242) gives the spelling of this as *Myscothyris* but this may be regarded as merely a *lapsus calami*.

[134] There is a *Miscus* F. Meuschen, 1778 in the Amphipoda but according to the Nomenclator Animalium this is a nomen nudum and consequently does not preoccupy

Monedula Latreille, 1802 [135] *nec* Linnaeus [in Hasselquist], 1762 *nec* Moehring, 1758. Hist. Nat. Crust. Insect., III, p. 345. [Two species.]

TYPE: *Bembex signata* Fabricius, 1781 [136] [= *Vespa signata* Linnaeus, 1758 = *Monedula signata* (L.) = *Stictia signata* (L.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Stictia* Illiger, 1807, *q.v.*

Moniaecera Ashmead, 1899. Canad. Entom., XXXI, p. 220. [Two species.]

TYPE: *Crabro abdominalis* Fox, 1895 [= *Moniaecera abdominalis* (Fox) = *Rhopalum abdominale* (Fox) = *Euphilis abdominalis* (Fox)]. (Original designation.)

Monomatium Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [No species.]

TYPE: *Larraxena princeps* Smith, 1851 [= *Monomatium princeps* (Smith)]. (Fixed by Pate, 1935, Ent. News, XLVI, p. 246.)

Isogenotypic with *Larraxena* Smith, 1851, *q.v.*

Morphota Smith, 1856. Catal. Hymen. Brit. Mus., IV, p. 293. [Three species.]

TYPE: *Morphota fasciata* Smith, 1856 [137] [= *Lyroda fasciata* (Smith)]. (Present designation.)

Motes Kohl, 1896.[138] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 263 & 351. [Two species.]

TYPE: *Notogonia odontophora* Kohl, 1892 [= *Motes odontophora* (Kohl) = *M.* (*Motes*) *odontophora* (Kohl)]. (Present designation.)

Jurine's name. Spinola in 1853 (Mem. Accad. Sci. Torina, (2), XIII, p. 53) spells Jurine's name *Mischus* but this may be interpreted as merely a typographical error or *lapsus calami.*

[135] Illiger, aware that Latreille's name was a homonym of Linnaeus' avian one in Gadebusch's 1762 translation of Hasselquist's Iter Palaestinum, proposed *Stictia* in lieu of it. The Internation Commission on Zoological Nomenclature in 1914, however, stated in Opinion 57 that ". . . the German translation by Gadebusch, published in 1762, does not give validity to the names published in the original edition of 1757." Thus Latreille's name *Monedula* might still be used for this genus, as it was for so long until Fox in 1901 (Ent. News, XII, p. 269) called attention to Illiger's name, were it not for the fact that Moehring had likewise used it for a genus of birds in 1758. However, irrespective of this, I doubt very much if it would be desirable to revert once more to *Monedula* since Opinion 57 is a very questionable one. The dissenting opinion written by Stejneger and concurred in by Hoyle and David Starr Jordan indicates that only these three had a clear concept of the principle involved, and I find myself fully in accord with them.

[136] *Vide* footnote 29 on *Bembex* Fabricius, 1777.

[137] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 165) selected *Morphota formosa* Smith, 1856 [sic!] as type but this designation is invalid inasmuch as *M. formosa* Smith was not a species originally included in the genus by Smith but was not described until 1858—two years later!

[138] *Vide* discussion of this genus in Appendix III.

Mutillonitela Bridwell, 1920. Proc. Hawaii. Ent. Soc., IV, p. 396. [Two species.]

TYPE: *Mutillonitela mimica* Bridwell [= *Saliostethus mimica* (Bridwell)].[139] (Original designation.)

Mysson Smith, 1856. Journ. Linn. Soc., Zool., XI, p. 367.

Typographical error for *Nysson* Latreille, 1796 & 1802, *q.v.*

Nectanebus Spinola, 1839. Ann. Soc. Ent. France, VII, p. 489. [Two species.]

TYPE: *Nectanebus Fischeri* Spinola. (Original designation.)

Neodasyproctus Arnold, 1926. Ann. Transvaal Mus., XI, p. 373.

TYPE: *Dasyproctus Kohli* Brauns (in Arnold) [= *Thyreopus* (*Neodasyproctus*) *Kohli* (Brauns) = *Dasyproctus* (*Neodasyproctus*) *Kohli* (Brauns)]. (Monobasic.)

Neofoxia Viereck, 1901. Trans. Amer. Ent. Soc., XXVII, p. 338. [Four species.]

TYPE: *Psen atrata* Panzer, 1806 [= *Trypoxylon atratum* Fabricius, 1805[140] (= ? *Sphex pallipes* Panzer, 1798) = *Neofoxia atrata* (F.) = *D.* (*Diodontus*) *atratus* (F.)].[140] (Original designation.)

Isogenotypic with *Diodontus* Curtis, 1834 *nec* Auctt., *q.v.*

Neosphex Reed, 1894.[141] Ann. Univ. Chile, LXXXV, p. 627.

TYPE: *Neosphex albospiniferus* Reed [= *Chlorion* (*Neosphex*) *albospiniferum* (Reed)]. (Monobasic.)

Nephridia Brullè, 1833. Ann. Soc. Ent. France, II, p. 408.

TYPE: *Nephridia xanthopus* Brullè [= *P.* (*Pison*) *xanthopus* (Brullè)].[142] (Monobasic.)

Nephritomma Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [Nomen nudum.]

Nesocrabro Perkins, 1899. Faun. Hawaiiensis, Hymen., I, pt., 1, p. 25. [Six species.]

TYPE: *Crabro rubrocaudatus* Blackburn, 1886 [= *Nesocrabro rubrocaudatus* (Blackburn) = *Crabro* (*Ectemnius Nesocrabro*) *rubrocaudatus* (Blackburn)]. (Present designation.)

[139] Pate (1935, Ent. News, XLVI, p. 248) is the authority for this synonymy.

[140] On the identity of *Sphex pallipes* Panzer, 1798 and *Trypoxylon atratum* Fabricius, 1805, see Richards, 1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 166, and Hartig, 1931, Stettin. Ent. Ztg., XCII, pp. 203–210.

[141] *Vide* Cockerell, 1899, Entomologist, XXXII, p. 14.

[142] Turner (1916, Proc. Zool. Soc. Lond., p. 621) is the latest authority for this synonymy.

Nesomimesa Perkins, 1899. Faun. Hawaiiensis, Hymen., I, pt., 1, p. 8. [Five species.]

TYPE: *Nesomimesa Hawaiiensis* Perkins [= *Psen* (*Nesomimesa*) *Hawaiiensis* (Perkins)]. (Present designation.)

Nitela Latreille, 1809. Gen. Crust. Insect., IV, p. 77.

TYPE: *Nitela Spinolae* Latreille. (Monobasic.)

Niteliopsis S. S. Saunders, 1873. Trans. Ent. Soc. Lond., 1873, p. 410.

TYPE: *Niteliopsis pisonoides* S. S. Saunders [= *Solierella pisonoides* (S. S. Saunders)]. (Monobasic.)

Nitelopterus Ashmead, 1897. Ent. News, VIII, p. 22.

TYPE: *Nitelopterus slossonae* Ashmead.[143] (Monobasic.)

Nothosphecius Pate, 1937. Bull. Brooklyn Ent. Soc., XXXI, p. 199.

TYPE: *Stizus Grandidieri* Saussure, 1887 [= *Sphecius* (*Nothosphecius*) *Grandidieri* (Saussure)]. (Original designation.)

Notoglossa Dahlbom, 1845. Hymen. Europ., I, p. 514.

TYPE: *Notoglossa sagittata* Dahlbom, 1845 [= *Oxybelus lamellatus* Olivier, 1811 = *Oxybelus lamellatum* Olivier]. (Monobasic.)

Isogenotypic with *Alepidaspis* A. Costa, 1882, *q.v.*

Notogonia A. Costa, 1867 *nec* Perty, 1850.[144] Ann. Mus. Zool. Univ. Napoli, IV, p. 82.

TYPE: *Tachytes nigra* Van der Linden, 1829 [= *Notogonia nigra* (Van der Linden) = *Motes* (*Spanolarra*) *nigra* (Van der Linden)]. (Monobasic.)

Isogenotypic with *Notogonidea* Rohwer, 1911, *q.v.*

Notogonidea Rohwer, 1911.[144] Proc. Ent. Soc. Wash., XIII, p. 234.

TYPE: *Tachytes nigra* Van der Linden, 1829 [= *Notogonidea nigra* (Van der Linden) = *Motes* (*Spanolarra*) *nigra* (Van der Linden)]. (Original designation.)

Isogenotypic with *Notogonia* A. Costa, 1867 *nec* Perty, 1850, *q.v.*

Nototis Arnold, 1927. Ann. Transvaal Mus., XII, p. 64.

TYPE: *Belomicrus* (*Nototis*) *bicornutus* Arnold. (Monobasic.)

[143] I have examined the type of this species in the United States National Museum and found that there are two submarginal cells in the fore wing, rather than just one as Ashmead states in his original description. The second submarginal cell is petiolate and quite small, but nevertheless discernible. Save for this character, *Nitelopterus slossonae* conforms in all respects with the groups which have hitherto been known as *Hypomiscophus* Cockerell, 1898 or *Miscophinus* Ashmead, 1898 which should now be regarded as synonyms of Ashmead's earlier name *Nitelopterus*.

[144] See discussion of this name under *Motes* Kohl in Appendix III.

Nursea Cameron, 1902.[145] Journ. Bombay Nat. Hist. Soc., XIV, p. 275.

TYPE: *Nursea carinata* Cameron. (Monobasic.)

Nysso Latreille, 1796.[146] Prec. Charac. Gen. Insect., p. 125. [No species.]

Nysson Latreille, 1802.[147] Hist. Nat. Crust. Insect., III, p. 340. [Two species.]

TYPE: *Crabro spinosus* Fabricius, 1775 [= *Sphex spinosa* Forster, 1771 = *Nysson spinosus* (Forster) = *N.* (*Nysson*) *spinosus* (Forster)]. (Designation of Shuckard, 1837,[148] Essay Indig. Foss. Hymen., p. 99.)

Isogenotypic with *Nysso* Latreille, 1796 and *Nyssonus* Rafinesque, 1815, *q.v.*

Nyssonus Rafinesque, 1815. Analyse de la Nature ou. Tabl. Univ., p. 124.

Emendation for, and isogenotypic with *Nysson* Latreille, *q.v.*

Ochleroptera Holmberg, 1903. An. Mus. Nac. Buenos Aires, (3), II, p. 487.

TYPE: *Ochleroptera oblita* Holmberg[149] [= *Clitemnestra* (*Ochleroptera*) *oblita* (Holmberg)]. (Monobasic.)

Oclocletes Banks, 1913. Bull. Amer. Mus. Nat. Hist., XXXII, p. 423. [Six species.]

TYPE: *Philanthus Sanbornii* Cresson, 1865 [= *Oclocletes Sanbornii* (Cresson) = *Philanthus Sanbornii* Cresson]. (Original designation.)

[145] Cameron originally placed this genus in the Scoliidae, but Turner states (1912, Proc. Zool. Soc. Lond., p. 725) that it should be treated as an aberrant genus of the Sphecoidea.

[146] This has been customarily regarded as a typographical error for *Nysson* and it would be well to continue to so regard it, particularly inasmuch as Latreille always thereafter used the spelling *Nysson*.

[147] It has been customary to regard *Nysson* as having been first proposed by Latreille in his Precis of 1796. To all intents and purposes this may still be regarded to be true. Latreille, however, employed there the orthography *Nysso* for the scientific name of the genus, the vernacular spelling being given as *Nysson*. The two names may be considered isogenotypic for all practical purposes, since *Nysso* is obviously a typographical error for *Nysson*. Latreille's 1802 spelling of *Nysson* was actually antedated in the "Erlangen List" of 1801 by Jurine and Panzer who coupled four species with the name, one of which was *Crabro spinosus* Fabricius. At the recent congress held in Lisbon, the International Commission on Zoological Nomenclature voted to suppress the "Erlangen List" so that this reference may hereafter be regarded as merely of academic interest.

[148] I find it impossible to accept Latreille's designation in 1810 of *Mellinus tricinctus* Fabricius, 1793 [= *Sphex spinosa* Forster, 1771] as a valid type fixation for *Nysson* Latreille; see discussion of this point in Appendix II under *Nysson*.

[149] Brèthes (1911, An. Mus. Nac. Buenos Aires, (3), XIII, p. 276) makes the following statement: ". . . Dr. E. L. Holmberg creó el género *Ochleroptera*, colocándolo, p. 487, entre *Cerceris* y *Trachypus*, lo que haria creer que ese género fuera un *Philanthidae*. He conseguido la identificación de un himenóptero que en las colecciones del Museo Nacional tiene et rótulo de *Lestiphorus chalconotus* (inédito) con la letra al parecer de Burmeister y que concuerda completamente con la descripción de *Ochleroptera oblita* Holbg.

Odontolarra Cameron, 1900. Ann. & Mag. Nat. Hist., (7), v, p. 35.

TYPE: *Odontolarra rufiventris* Cameron [= *Lyroda rufiventris* (Cameron)].[150] (Monobasic.)

Olgia Radoszkowski, 1877. [In Fedtschenko,] Reise in Turkestan, II, Sphegid., p. 33.

TYPE: *Olgia modesta* Radoszkowski. (Monobasic.)

Omphalius Vachal, 1899 *nec* Philippi, 1847 *nec* Erichson, 1891. Ann. Soc. Ent. France, LXVIII, p. 534.

TYPE: *Omphalius niger* Vachal [151] [= *Scotomphales niger* (Vachal)]. (Monobasic.)

Isogenotypic with *Scotomphales* Vachal, 1900, *q.v.*

Oreocrabro Perkins, 1902. Trans. Ent. Soc. Lond., 1902, p. 146.

TYPE: *Crabro abnormis* Blackburn, 1886 [= *Oreocrabro abnormis* (Blackburn) = *Crabro* (*Ectemnius Oreocrabro*) *abnormis* (Blackburn)]. (Original designation.)

Orthoxybelus Minkiewicz, 1934. Polski Pismo Ent., XII, p. 251. [Two species.]

TYPE: *Vespa uniglumis* Linnaeus, 1758 [= *Oxybelus* (*Orthoxybelus*) *uniglumis* (L.) = *Oxybelus uniglume* (L.)].[155] (Present designation.)

Isogenotypic with *Oxybelus* Latreille, 1796, *q.v.*

Oryttus Spinola, 1836.[152] Bull. Soc. Ent. France, v, p. xxiii.

TYPE: *Sphex concinna* Rossi, 1790 [= *Oryttus concinnus* (Rossi) = *O.* (*Oryttus*) *concinnus* (Rossi)]. (Monobasic and original designation.)

Isogenotypic with *Agraptus* Wesmael, 1852, *q.v.*

"A la vez este himenóptero concuerda con la descripción de *Gorytes parvulus* Handl. (1888), excepto en lo siguiente: las antenas tienen el funículo mejor ferrugíneo, más ó menos obscuro, con bastante de amarillo, y el 3.er anillo abdominal tiene un puntito amarillo de cada lado. . . ."

A comparison of material from the Argentine and Brazil of the *Gorytes bipunctatus*-group, for which Rohwer proposed the name *Paramellinus*, with Holmberg's original description confirms Brèthes' remarks and I believe that *Paramellinus* Rohwer, 1912 should be regarded as a synonym of *Ochleroptera* Holmberg, 1903. The latter, however, is at most but a subgenus of *Clitemnestra* Spinola, 1851.

[150] Turner (1914, Ann. & Mag. Nat. Hist., (8), XIV, p. 256) is the authority for this synonymy.

[151] Vachal states that his *Omphalius niger* may be the male of *Stizus niger* Radoszkowski, 1881 but the data now at hand do not seem to indicate that this conjecture is correct.

[152] *Vide* footnote 62 on *Dienoplus* Fox, 1893.

Oxybeloides Radoszkowski, 1877. [In Fedtschenko,] Reise in Turkestan, II, Sphegid., p. 68.

TYPE: *Oxybeloides fasciatus* Radoszkowski [= *Belomicrus* (*Oxybeloides*) *fasciatus* (Radoszkowski)].[153] (Monobasic.)

Oxybelomorpha Brauns, 1896. [In Kohl,] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 475.

TYPE: *Oxybelomorpha Kohlii* Brauns [= *Belomicrus* (*Oxybelomorpha*) *Kohlii* (Brauns)]. (Monobasic.)

Oxybelus Latreille, 1796. Prec. Char. Gen. Insect., p. 129. [No species.] 1802. Hist. Nat. Crust. Insect., III, p. 343. [One species.][154]

TYPE: *Crabro uniglumis* Fabricius, 1775 [= (*Oxybelus uniglumis* (F.) =) *Vespa uniglumis* Linnaeus, 1758 = *Oxybelus uniglume* (L.)].[155] (Monobasic, fixed by Latreille, 1802, *v.s.*)

Isogenotypic with *Orthoxybelus* Minkiewicz, 1934, *q.v.*

Palarus Latreille, 1802. Hist. Nat. Crust. Insect., III, p. 336.

TYPE: *Tiphia flavipes* Fabricius, 1793[156] [= *Palarus rufipes* Latreille, 1811]. (Monobasic.)

Palmodes Kohl, 1890. Ann. K. K. Naturhist. Hofmus., Wien, V, p. 112. [Ten species.]

TYPE: *Sphex occitanica* Lepeletier & Serville, 1828 [= *Sphex* (*Palmodes*) *occitanicus* (Lepeletier & Serville) = *Chlorion* (*Palmodes*) *occitanicum* (Lepeletier & Serville)]. (Designation of Fernald, 1906, Proc. U. S. Nat. Mus., XXXI, p. 318.)

Paraceramius Radoszkowski, 1887. Hor. Soc. Ent. Ross., XXI, p. 432.

TYPE: *Paraceramius Koreensis* Radoszkowski [= *Pison* (*Pisonoides*) *Koreense* (Radoszkowski)].[157] (Monobasic.)

Paracerceris Brèthes, 1913. An. Mus. Nac. Hist. Nat. Buenos Aires, XXIV, p. 127.

TYPE: *Paracerceris tridentifera* Brèthes. (Monobasic.)

[153] Kohl (1923, Konowia, II, p. 182) is the authority for this synonymy.

[154] Actually the first time species were placed in the genus *Oxybelus* was in 1801 in Jurine and Panzer's "Erlangen List." Three species were given there as exponents, and Latreille selected the second of these, *Crabro uniglumis* Fabricius, as type in 1810. However, at the recent Congress held in Lisbon, the International Commission on Zoological Nomenclature voted to suppress the "Erlangen List."

[155] The gender of *Oxybelus* has hitherto been regarded as masculine, but a study of its etymology at once reveals that it is neuter.

[156] *Vide* Bradley, 1919, Trans. Ent. Soc. Lond., p. 65; *v. et.* discussion of *Gonius* Jurine in Appendix I.

[157] Turner (1916, Proc. Zool. Soc. Lond., p. 617) is the authority for this synonymy.

Paracrabro Turner, 1907. Ann. & Mag. Nat. Hist., (7), XIX, p. 274.
TYPE: *Paracrabro Froggatti* Turner. (Original designation and monobasic.)

Paraliris Kohl, 1883. Verh. Zool.-Bot. Ges. Wien, XXXIII, p. 361.
TYPE: *Paraliris Kriechbaumeri* Kohl. (Monobasic.)

Parallelopsis Maidl, 1915.[158] Boll. Lab. Zool., Portici, IX, p. 147.
TYPE: *Parallelopsis africana* Maidl, 1914 [= *Gastrosericus Neavei* Turner, 1913].[159] (Original designation and monobasic.)

Paramellinus Rohwer, 1912. Proc. U. S. Nat. Mus., XLI, p. 469.
TYPE: *Gorytes bipunctatus* Say, 1824 [= *Paramellinus bipunctatus* (Say) = *Clitemnestra* (*Ochleroptera*) *bipunctata* (Say)].[160] (Original designation.)

Paranothyreus Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 490. [Three species.]
TYPE: *Crabro hilaris* Smith, 1856 [= *Crabro* (*Thyreopus Paranothyreus*) *hilaris* (Smith) = *C.* (*Crabro Paranothyreus*) *hilaris* (Smith)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 213.)

Paranysson Guérin-Méneville, 1844. Iconogr. Règn. Animal., VII, Insect., p. 441.
TYPE: *Nysson* (*Paranysson*) *abdominale* Guérin [= *P.* (*Paranysson*) *abdominale* (Guérin)].[161] (Monobasic.)

Parapiagetia Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, pp. 261 & 373. [Two species.]
TYPE: *Piagetia Saussurei* Kohl, 1894 [= *Piagetia odontostoma* Kohl, 1883 = *Parapiagetia odontostoma* (Kohl)]. (Original designation.)

Parapison Smith, 1869. Trans. Ent. Soc. Lond., 1869, p. 298. [Four species.]
TYPE: *Pisonoides obliteratum* Smith, 1857 [= *Parapison obliteratus* (Smith) = *Pison* (*Pisonoides*) *obliteratum* (Smith)]. (Present designation.)
Isogenotypic with *Pisonoides* Smith, 1857, *q.v.*

Parapodium Taschenberg, 1869. Zeitschr. f. d. ges. Naturwissen., Halle, XXXIV, p. 423.
TYPE: *Parapodium biguttatum* Taschenberg, 1869 [= *Podium rufipes* Fabricius, 1805[162] = *P.* (*Podium*) *rufipes* Fabricius]. (Monobasic.)
Isogenotypic with *Podium* Fabricius, 1805, and *Talthybius* Rafinesque, 1815, *q.v.*

[158] *Vide* footnote 83 on *Gastrosericus* Spinola, 1839.
[159] Arnold (1922, Ann. Transvaal Mus., IX, p. 125) is the authority for this synonymy.
[160] *Vide* footnote 149 on *Ochleroptera* Holmberg, 1903 for a discussion of this synonymy.
[161] Turner (1914, Ann. & Mag. Nat. Hist., (8), XIV, pp. 338–343) is the authority for this synonymy.
[162] Schulz (1912, Berlin. Ent. Zeitschr., LVII, p. 78) is the authority for this synonymy.

Parapsammophila Taschenberg, 1869. Zeitschr. f. d. ges. Naturwissen., Halle, XXXIV, p. 429. [Three species.]

TYPE: *Parapsammophila miles* Taschenberg, 1869 [= *Ammophila cyanipennis* Lepeletier, 1845 = *Sphex* (*Parapsammophila*) *cyanipennis* (Lepeletier)]. (Present designation.)

Parasphex Smith, 1856. Catal. Hymen. Brit. Mus., IV, p. 267.

TYPE: *Sphex albisecta* Lepeletier & Serville, 1828 [= *Parasphex albisecta* (Lepeletier & Serville) = *Ammophila? Kirbii* Van der Linden, 1827 = *Prionyx Kirbii* Van der Linden, 1827 = *Chlorion* (*Prionyx*) *Kirbii* (Van der Linden)]. (Designation of Kohl, 1885, Termész. Füzet., IX, p. 164.)

Isogenotypic [163] with *Enodia* Dahlbom, 1844 *nec* Hübner, 1816 and *Prionyx* Van der Linden, 1827, *q.v.*

Parathyreopus Kohl, 1915. Ann. K. K. Naturhist. Hofmus., Wien, XXIX, p. 138.

TYPE: *Crabro filiformis* Radoszkowski, 1877 [= *Crabro* (*Thyreopus Parathyreopus*) *filiformis* (Radoszkowski) = *C.* (*Crabro Parathyreopus*) *filiformis* (Radoszkowski)]. (Monobasic.)

Passaloecus [164] Shuckard, 1837. Essay Indig. Foss. Hymen., p. 188. [Three species.]

TYPE: *Pemphredon insignis* Van der Linden, 1829 [165] [= *Passaloecus insignis* (Van der Linden) = *P.* (*Passaloecus*) *insignis* (Van der Linden)]. (Original designation.)

Isogenotypic with *Xyloecus* Shuckard, 1837 *nec* Serville, 1833 and *Heroecus* Verhoeff, 1890, *q.v.*

Pavlovskia Gussakovskij, 1935. Trav. fil. Acad. Sci. URSS, Tadjikistan, no. 5, p. 424.

TYPE: *Pavlovskia tadzhika* Gussakovskij [= *Plenoculus tadzhikus* (Gussakovskij)]. [165a] (Original designation and monobasic.)

Pelopoeus Latreille, 1802. [167] Hist. Nat. Crust. Insect., III, p. 334. [Two species.]

[163] *Vide* Pate, 1935, Ent. News, XLVI, pp. 250, 264–265.

[164] Saussure (1892, Hist. Nat. Madagascar, XX, Hymen., pp. 565 & 567) gives the spelling as *Passaleucus;* Müller (1911, Ent. Rundschau, XXVIII, p. 107) uses *Passalvecus;* and Viereck (1904, Trans. Amer. Ent. Soc., XXX, p. 243) gives *Passalaccus.* I regard all of these as obvious typographical errors or *lapsus calamorum.*

[165] *Vide* Richards, 1935, Trans. R. Ent. Soc. London, LXXXIII, p. 165.

[165a] Although I have seen no material of Gussakovskij's species, nevertheless, his excellent description and figures of *Pavlovskia* coincide in all essential respects with *Plenoculus* Fox, and have led me to conclude that in all probability the two are congeneric, or that *Pavlovskia* Gussakovskij, 1935 is at most but a subgenus of *Plenoculus* Fox, 1893.

[166] Schulz (1912, Berlin. Ent. Zeitschr., LVII, p. 56) is the authority for this synonymy.

TYPE: *Sphex spirifex* Linnaeus, 1758 [= *Pelopoeus spirifex* (L.) = *Sphex Aegyptia* Linnaeus, 1758[166] = *S.* (*Sceliphron*) *Aegyptium* (L.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Sceliphron* Klug, 1801 and *Sceliphrum* Schulz, 1906, *q.v.*

Pemphilis Risso, 1826.[168] Hist. Nat. Europ. Merid., v, p. 227. [Two species.]

TYPE: *Crabro palmatus* Panzer, 1797 [= (*Pemphilis palmata* [Panzer]) = *Vespa cribraria* Linnaeus, 1758 = *C.* (*C. Crabro*) *cribrarius* (L.)]. (Designation of Pate, 1935, Ent. News, XLVI, p. 245.)

Isogenotypic with *Crabro* Fabricius, 1775 *nec* Geoffroy, 1762 and *Thyreopus* Lepeletier & Brullè, 1835, *q.v.*

Pemphredon Latreille, 1796. Prec. Charac. Gen. Insect., p. 128. [No species.]
1802. Hist. Nat. Crust. Insect., III, p. 342. [Two species.]

TYPE: *Crabro lugubris* Fabricius, 1793[169] [= *Pemphredon lugubris* (Fabricius) = *P.* (*Pemphredon*) *lugubris* (Fabricius)]. (Designation of Shuckard, [January 2] 1837, Essay Indig. Foss. Hymen., p. 193.)

Philanthocephalus Cameron, 1890. Biol. Centr.-Amer., Hymen., II, p. 86. [Five species.]

TYPE: *Philanthocephalus gracilis* Cameron [= *Trachypus gracilis* (Cameron)].[170] (Present designation.)

Philanthus Fabricius, 1790. Skrivt. Naturhist. Selsk., Kjobnhavn, I, 1, p. 224. [Eight species.]

TYPE: *Philanthus coronatus* Fabricius. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 246.)[171]

[167] Palisot de Beauvois (1807, Insect. Rec. Afriq. Amer., p. 49) spells this name *Pelopaeus*, accrediting the genus to Latreille and including the same two species Latreille originally placed in *Pelopoeus*. This orthography, as well as divers others of later authors—*Pelopeus*, *Peloepus*, *Peleopus*, may be regarded as obvious typographical errors or *lapsus calamorum* for *Pelopoeus* Latreille.

[168] *Vide* Pate (1935, Ent. News, XLVI, p. 245–246) for a discussion of this name and synonymy.

[169] This case is somewhat complicated, consequently see the discussion of it in Appendix II under the name *Pemphredon* Latreille, 1796, and in Appendix I under *Cemonus* Panzer, 1806.

[170] Cameron (1890, Ent. Monthly Mag., (2), I, p. 314) admits that his *Philanthocephalus* is congeneric with *Trachypus* Klug, 1810. There are at least two distinct groups within the generic limits of *Trachypus*, and it is not improbable that eventually Cameron's name *Philanthocephalus* may prove to be applicable to the atypical subgenus. This, however, must await examination of Klug's type of *Trachypus Gomesii* which unfortunately I have not as yet had an opportunity to study.

[171] The designations of Latreille, 1810 and Curtis, 1829 may not be construed as valid. For a discussion of these, see *Philanthus* Fabricius, 1790 in Appendix II.

Philoponidea [172] new name for *Philoponus* Kohl, 1889 *nec* Thorell, 1887.

TYPE: *Philoponus Dewitzii* Kohl, 1889 [= *Philoponidea Dewitzii* (Kohl)]. (Present designation.)

Isogenotypic with *Philoponus* Kohl, 1889 *nec* Thorell, 1887, *q.v.*

Philoponites Cockerell, 1916. Proc. U. S. Nat. Mus., XLIX, p. 482.

TYPE: *Philoponites clarus* Cockerell.[173] (Original designation and monobasic.)

Philoponus Kohl, 1889 *nec* Thorell, 1887.[172] Ann. K. K. Naturhist. Hofmus., Wien, IV, p. 193. [Two species.]

TYPE: *Philoponus Dewitzii* Kohl [= *Philoponidea Dewitzii* (Kohl)]. (Present designation.)

Isogenotypic with *Philoponidea* new name, *q.v.*

Physoscelis Westwood, 1840. Introd. Mod. Class. Insects, II, Synops. Gen., p. 80.

TYPE: *Crabro rufiventris* Panzer, 1799 [= (*Physoscelis rufiventris* (Panzer) =) *Sphex clavipes* Linnaeus, 1758 = *Rhopalum clavipes* (L.) = *Euplilis clavipes* (L.)]. (Monobasic.)

Isogenotypic with *Physoscelus* Lepeletier & Brullè, 1835, *Rhopalum* Kirby, 1829, and *Euplilis* Risso, 1826, *q.v.*

Physoscelus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 804. [Two species.]

TYPE: *Crabro rufiventris* Panzer, 1799 [= (*Physoscelus rufiventris* (Panzer) =) *Sphex clavipes* Linnaeus, 1758 = *Rhopalum clavipes* (L.) = *Euplilis clavipes* (L.)]. (Designation of Richards, 1935,[174] Trans. R. Ent. Soc. Lond., LXXXIII, p. 168.)

Isogenotypic with *Physoscelis* Westwood, 1840, *Rhopalum* Kirby, 1829, and *Euplilis* Risso, 1826, *q.v.*

[172] Kohl suggested (1893, Verh. Zool.-Bot. Ges., Wien, XLIII, pp. 546–547, and 1896, Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 336) there was a possibility that his genus *Philoponus* might be congeneric with *Pseudoscolia* Radoszkowski, 1876. However, due to Radoszkowski's extremely inadequate characterization of his genus, and the fact that he had not had an opportunity to examine material of *Pseudoscolia maculata* Radoszkowski, the genotype of *Pseudoscolia*, Kohl hesitated to adopt Radoszkowski's earlier name. To date this problem is still unsolved. Consequently in view of the fact that *Philoponus* Kohl and *Acolpus* Vachal, the next name available for this group, are both homonyms, I have ventured to propose *Philoponidea* in lieu of *Philoponus* Kohl, 1889 *nec* Thorell, 1887, with *Philoponus Dewitzii* Kohl, 1889 as type. (See p. 4.)

[173] Fossil: Oligocene, Gurnet Bay, Isle of Wight, England.

[174] Richards (*loc. cit.*) states that Westwood fixed the type of *Physoscelus* Lepeletier & Brullè in 1840, but this is incorrect. In the first place, Westwood specifically states that *Crabro rufiventris* Panzer is merely an example; in the second place, he gives the spelling *Physoscelis*. This latter may, however, be regarded as a typographical error or a *lapsus calami*. Nevertheless, it was the orthography employed by many latter authors.

Piagetia Ritsema, 1872. Ent. Month. Mag., IX, p. 121. [Two species.]

TYPE: *Piagetia Ritsemae* Ritsema [= *Dicranorhina Ritsemae* (Ritsema)].[175] (Designation of Bingham, 1897, Faun. Brit. Ind., Hymen., I, p. 210.)

Isogenotypic with *Dicranorhina* Shuckard, 1840, *q.v.*

Pison Jurine, 1808. [In Spinola,] Insect. Ligur., II, p. 255.

TYPE: *Pison Jurinei* Spinola, 1808 [= *Alyson ater* Spinola, 1808 = *P.* (*Pison*) *atrum* (Spinola)]. (Monobasic.)

Isogenotypic with *Tachybulus* Latreille, 1809, and *Pisum* Schulz, 1906 *nec* Megerle, 1811, *q.v.*

Pisonitus Shuckard, 1837. Trans. Ent. Soc. Lond., II, p. 79. [Two species.]

TYPE: *Pison* (*Pisonitus*) *argentatus* Shuckard [= *P.* (*Pison*) *argentatum* (Shuckard)].[176] (Present designation.)

Pisonoides Smith, 1857. Journ. & Proc. Linn. Soc., Zool., II, p. 104.

TYPE: *Pison* (*Pisonoides*) *obliteratus* Smith [= *Pison* (*Pisonoides*) *obliteratum* Smith]. (Monobasic.)

Isogenotypic with *Parapison* Smith, 1869, *q.v.*

Pisonopsis Fox, 1893. Psyche, VI, p. 553.

TYPE: *Pisonopsis clypeata* Fox. (Monobasic.)

Pisum Schulz, 1906 [177] *nec* Megerle, 1811. Spolia Hymenopterologica, p. 212.

Emendation for, and isogenotypic with *Pison* Jurine, 1808, *q.v.*

Plenoculus Fox, 1893. Psyche, VI, p. 554.

TYPE: *Plenoculus Davisi* Fox. (Monobasic.)

Pluto new name for *Psenia* Malloch, 1933 [178] *nec* Kirby, 1829.[179]

TYPE: *Mimesa tibialis* Cresson, 1872 [= *Psenia tibialis* (Cresson) = *Pluto tibialis* (Cresson)]. (Present designation.)

Isogenotypic with *Psenia* Malloch, 1933 *nec* Kirby, 1829, *q.v.*

Ashmead in 1899 (Canad. Entom., XXXI, p. 220) selected *Sphex clavipes* Linnaeus, 1758 as type, stating that *Crabro rufiventris* was a synonym. Ashmead, however, designated the type of *Physoscelis* [Westwood, 1840], not *Physoscelus* Lepeletier & Brullè, 1835 and his designation may not therefore be construed as valid. Apparently the first correct designation of a type for *Physoscelus* Lepeletier & Brullè, 1835 must be accredited to Richards (*loc. cit.*).

[175] Turner (1912, Ann. & Mag. Nat. Hist., (8), IX, p. 199) is the authority for this synonymy.

[176] Turner (1916, Proc. Zool. Soc. Lond., p. 619) is the authority for this synonymy.

[177] Agassiz in 1846 in the Index Universalis of his Nomenclator Zoologicus was actually the first to emend *Pison* to this form.

[178] Proc. U. S. Nat. Mus., LXXXII, art. 26, p. 44, (1933).

[179] Stephens, Syst. Catal. Brit. Insect., p. 361, (1829).

Podagritus Spinola, 1851. [In Gay,] Hist. fis. pol. Chile, Zool., VI, p. 353.

TYPE: *Podagritus Gayi* Spinola [= *Crabro* (*Rhopalum Podagritus*) *Gayi* (Spinola) = *Euplilis* (*Podagritus*) *Gayi* (Spinola)]. (Monobasic.)

Podalonia Spinola, 1851. Mem. Acad. Sci. Torino, (2), XIII, p. 53.

TYPE: *Ammophila Bocandei* Spinola [= *Podalonia Bocandei* Spinola]. (Monobasic.)

Podidum Griffith, 1832. The Animal Kingdom, XV, p. 376.

Typographical error or *lapsus calami* for *Podium* Fabricius, 1805, *q.v.*

Podium Fabricius, 1805. Syst. Piezat., Char. Gen., p. x, [no species]; p. 183. [Two species.]

TYPE: *Podium rufipes* Fabricius [= *P.* (*Podium*) *rufipes* (F.)]. (Designation of Latreille, 1810, p. 438.)

Isogenotypic with *Talthybius* Rafinesque, 1815 and *Parapodium* Taschenberg, 1869, *q.v.*

Polemistus Saussure, 1892. [In Grandidier,] Hist. Nat. Madagascar, XX, Hymen., p. 565. [Two species.]

TYPE: *Polemistus macilentus* Saussure [= *Passaloecus* (*Polemistus*) *macilentus* (Saussure)]. (Present designation.)

Polymistus Ashmead, 1899. Canad. Entom., XXXI, pp. 222 & 223. [No species.]

A typographical error or *lapsus calami* for *Polemistus* Saussure, 1892, *q.v.*

Priononyx Dahlbom, 1844. Hymen. Europ., I, p. 28.

TYPE: *Sphex Thomae* Fabricius, 1775 [= *Priononyx Thomae* (F.) = *Chlorion* (*Priononyx*) *Thomae* (F.)]. (Monobasic.)

Prionyx Van der Linden, 1827.[180] Nouv. Mem. Acad. R. Sci. Bruxelles, IV, p. 362.

TYPE: *Ammophila? Kirbii* Van der Linden [= *Prionyx Kirbii* Van der Linden = *Chlorion* (*Prionyx*) *Kirbii* (Van der Linden)]. (Monobasic.)

Isogenotypic with *Enodia* Dahlbom, 1844 *nec* Hübner, 1816 and *Parasphex* Smith, 1856, *q.v.*

Pronoeus Latreille, 1809.[181] Gen. Crust. Insect., IV, p. 56.

TYPE: *Dryinus aeneus* Fabricius, 1805 [= *Pronoeus aeneus* (F.) = *Ampulex Dahlbomii* Kohl, 1893[182] = *A.* (*Ampulex*) *aenea* (F.)]. (Monobasic.)

[180] *Vide* Pate, 1935, Ent. News, XLVI, pp. 250, 264–265.

[181] *Vide* Pate, 1935, Ent. News, XLVI, p. 247.

[182] Schulz (1912, Berlin. Ent. Zeitschr., LVII, p. 80) is the authority for this synonymy.

Prophilanthus Cockerell, 1906. Bull. Mus. Comp. Zool., Harvard Coll., L, p. 46.

TYPE: *Prophilanthus destructus* Cockerell.[183] (Monobasic.)

Prosopigastra A. Costa, 1867. Ann. Mus. Zool. Napoli, IV, p. 88.

TYPE: *Prosopigastra punctatissima* A. Costa. (Monobasic.)

Proterosphex Fernald, 1905.[184] Ent. News, XVI, p. 165. [Fifty-one species.]

TYPE: *Sphex maxillosa* Fabricius, 1793 [= *Chlorion* (*Proterosphex*) *maxillosum* (F.) = *Chlorion* (*Ammobia*) *maxillosum* (F.)]. (Original designation.)

Protostigmus Turner, 1918. Ann. & Mag. Nat. Hist., (9), I, p. 356.

TYPE: *Protostigmus championi* Turner. (Monobasic.)

Protothyreopus Ashmead, 1899. Canad. Entom., XXXI, p. 170. [Four species.]

TYPE: *Crabro rufifemur* Packard, 1866 [= *Protothyreopus rufifemur* (Packard) = *Crabro* (*Ectemnius Protothyreopus*) *rufifemur* (Packard)]. (Original designation.)

Psammaecius Lepeletier, 1832. Ann. Soc. Ent. France, I, p. 72.

TYPE: *Gorytes punctulatus* Van der Linden, 1829[185] [= *Psammaecius punctulatus* (Van der Linden)]. (Monobasic.)

Psammaletes Pate, 1936. Trans. Amer. Ent. Soc., LXII, p. 49. [Three species.]

TYPE: *Gorytes bigeloviae* Cockerell & Fox, 1895 [= *Hoplisoides* (*Psammaletes*) *bigeloviae* (Cockerell & Fox)]. (Original designation.)

Psammophila Dahlbom, 1842 *nec* T. Brown, 1827. Dispos. Method. Spec. Scand. Hymen., I, pp. 2 & 8.[186] [Two species.]

TYPE: *Ammophila affinis* Kirby, 1798 [= *Psammophila affinis* (Kirby) = *Podalonia affinis* (Kirby)]. (Designation of Fernald, 1927, Proc. U. S. Nat. Mus., LXXI, art. 9, p. 11.)

[183] Fossil: Miocene, Florissant, Colorado.

[184] Proposed for *Sphex* Auctt. *nec* Linnaeus, 1758. See discussion of *Sphex* Linnaeus in Appendix II.

[185] I have seen no material of this species and am unable to give with any certainty its correct generic and subgeneric position. *Psammaecius* may eventually prove to be a subgenus of *Gorytes* Latreille, or possibly the correct name for the group now known as *Hoplisoides* Gribodo.

[186] I have not seen a copy of this reference but have had to rely on Fernald (1927, Proc. U. S. Nat. Mus., LXXI, Art. 9, p. 11), Dalla Torre's Catalogue, and the papers of Kohl.

Psen Latreille, 1796. Prec. Char. Gen. Insect., p. 122. [No species.]
1802.[187] Hist. Nat. Crust. Insect., III, p. 338. [One species.]

TYPE: *Sphex atra* Fabricius, 1793 [= *Psen ater* (F.) = *Ps.* (*Psen*) *ater* (F.)]. (Monobasic, fixed by Latreille, 1802, *loc. cit.*)

Isogenotypic with *Mesopora* Wesmael, 1852, *Dahlbomia* Wissmann, 1849. and *Psenia* Kirby [in Stephens], 1829, *q.v.*

Pseneo Malloch, 1933. Proc. U. S. Nat. Mus., LXXXII, art. 26, p. 7. [Eight species.]

TYPE: *Psen kohlii* Fox, 1898 [= *Psen* (*Pseneo*) *kohlii* (Fox)]. (Original designation.)

Psenia Kirby, 1829.[188] [In Stephens,] Syst. Catal. Brit. Insects, p. 361. [Nine species?]

TYPE: *Sphex atra* Fabricius, 1793 [= *Psen ater* (F.) = *Ps.* (*Psen*) *ater* (F.)]. (Present designation.)

Isogenotypic with *Psen* Latreille, 1796, *Dahlbomia* Wissmann, 1849, and *Mesopora* Wesmael, 1852, *q.v.*

Psenia Malloch, 1933 *nec* Kirby, 1829. Proc. U. S. Nat. Mus., LXXXII, art. 26, p. 44. [Sixteen species.]

TYPE: *Mimesa tibialis* Cresson, 1872 [= *Psenia tibialis* (Cresson) = *Pluto tibialis* (Cresson)]. (Original designation.)

Isogenotypic with *Pluto* new name, *q.v.*

Psenulus Kohl, 1896. Ann. K. K. Naturhist. Hofmus., Wien, XI, pp. 254 & 293. [*ca.* twelve species.]

TYPE: *Psen fuscipennis* Dahlbom, 1844 [= *Psenulus fuscipennis* (Dahlbom) = *Diodontus* (*Psenulus*) *fuscipennis* (Dahlbom)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 224.)

Psenus Rafinesque, 1815. Analyse de la Nature ou Tabl. Univ., p. 124. [Nomen nudum.]

Pseudanthophilus Ashmead, 1899. Canad. Entom., XXXI, p. 294. [Five species?]

TYPE: *Philanthus ventilabris* Fabricius, 1798 [= *Pseudanthophilus ventilabris* (F.) = *Philanthus ventilabris* F.]. (Original designation.)

[187] Jurine and Panzer in the "Erlangen List" of 1801 give *Sphex atra* Fabricius, 1793 as the sole example of *Psen* Latreille, 1796, but the International Commission on Zoological Nomenclature at the recent congress held in Lisbon voted to suppress this paper. See discussion of *Psen* Latreille in Appendix II.

[188] Stephens states that this is a manuscript name of Kirby's, and records it as a synonym of *Psen* Latreille [,1802], of which he lists nine species.

Pseudocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 169. [Three species.]

TYPE: *Crabro chrysarginus* Lepeletier, 1845 [= (*Pseudocrabro chrysarginus* (Lepeletier) =) *Crabro chrysargyrus* Lepeletier & Brullè, 1835 = *Crabro* (*Ectemnius Hypocrabro*) *chrysargyrus* (Lepeletier & Brullè)]. (Original designation.)

Pseudohelioryctes Ashmead, 1899. Canad. Entom., XXXI, p. 248.

TYPE: *Heliorycte**s melanopygus* [sic!] Ashmead, 1899 [= *Heliorycte**s melanopyrus* Fox, 1896 *nec* Smith, 1856 = *Pseudoheliorycte**s? Foxii* Ashmead, 1899 = *P.* (*Paranysson*) *Foxii* (Ashmead)].[189] (Original designation.)

Pseudolarra Reed, 1894. An. Univ. Chile, LXXXV, p. 638. [Two species.]

TYPE: *Arpactus ? larroides* Spinola, 1851 [= *Pseudolarra larroides* (Spinola) = *Heliocausus Fairmairei* Kohl, 1892[190] = *Heliocausus larroides* (Spinola)]. (Present designation.)

Isogenotypic with *Heliocausus* Kohl, 1892, *q.v.*

Pseudonysson Radoszkowski, 1876. Hor. Soc. Ent. Ross., XII, p. 104.

TYPE: *Pseudonysson fasciatus* Radoszkowski [= *P.* (*Pison*) *fasciatum* (Radoszkowski)].[191] (Monobasic.)

Pseudoplisus Ashmead, 1899. Canad. Entom., XXXI, p. 323. [Twenty species.]

TYPE: *Gorytes floridanus* Fox, 1891 [= *Pseudoplisus floridanus* (Fox) = *Gorytes* (*Pseudoplisus*) *floridanus* (Fox)]. (Original designation.)

Pseudoscolia Radoszkowski, 1876.[192] Hor. Soc. Ent. Ross., XII, p. 103.

TYPE: *Pseudoscolia maculata* Radoszkowski. (Monobasic.)

Pseudosphex Taschenberg, 1869 *nec* Hübner, 1818 & 1820. Zeitschr. f. d. gesam. Naturwissen., Halle, XXXIV, p. 420.

TYPE: *Pseudosphex pumilio* Taschenberg [= *Chlorion* (*Neosphex*)[193] *pumilio* (Taschenberg)]. (Monobasic.)

[189] Turner (1914, Ann. & Mag. Nat. Hist., (8), XIV, p. 343) is the authority for this synonymy. The type of *Pseudoheliorycte**s Foxii* Ashmead, 1899, is a male, taken by Dr. A. Donaldson Smith on June 20, 1894, about six miles due north of Kulâma at the north end of Lake Donaldson, an arm of Lake Stephanie in Abyssinia, and is in the collections of the Academy of Natural Sciences of Philadelphia, Type no. 4118.

[190] Herbst (1921, Stettin. Ent. Ztg., LXXXII, p. 115) is the authority for this synonymy.

[191] Turner (1916, Proc. Zool. Soc. London, p. 620) is the latest authority for this synonymy.

[192] *Vide* footnote 172 under *Philoponidea*.

[193] *Vide* Cockerell, 1899, Entomologist, XXXII, p. 14.

Pseudoxybelus Gussakovskij, 1933. Trav. Inst. Zool. Acad. Sci. URSS, I, p. 266.

TYPE: *Belomicrus* (*Pseudoxybelus*) *persa* Gussakovskij [= *Belomicrus* (*Oxybelomorpha*) *persa* (Gussakovskij)]. (Monobasic.)

Ptygosphex Gussakovskij, 1928.[194] Bull. Inst. Zool. Appliq. Phytopath., Leningrad, IV, p. 18.

TYPE: *Ptygosphex murgabensis* Gussakovskij. (Original designation and monobasic.)

Rhectognathus Pate, 1936. Ent. News, XLVII, p. 147.

TYPE: *Encopognathus* (*Rhectognathus*) *pectinatus* Pate. (Original designation and monobasic.)

Rhinonitela Williams, 1928.[195] Exp. Sta., Hawaiian Sugar Planters' Assn., Ent. Ser., Bull. 19, p. 97. [Two species.]

TYPE: *Rhinonitela domestica* Williams [= *Tenila domestica* (Williams)].[195] (Original designation.)

Rhinopsis Westwood, 1844. Arcan. Entom., II, p. 68.

TYPE: *Rhinopsis Abbottii* Westwood, 1844 [= *Ampulex canaliculata* Say, 1823 = *Ampulex* (*Rhinopsis*) *canaliculata* (Say)].[196] (Monobasic.)

Rhopalum Kirby, 1829. [In Stephens,] Nomenclature of British Insects, p. 34. [Syst. Catal. Brit. Insects, p. 366.] [Three species.]

TYPE: *Crabro rufiventris* Panzer, 1799 [= (*Rhopalum rufiventris* (Panzer) =) *Sphex clavipes* Linnaeus, 1758 = *Rhopalum clavipes* (L.) = *Euplilis clavipes* (L.)].[197] (Designation of Curtis, 1837, Brit. Ent., XIV, p. 656.)

Isogenotypic with *Euplilis* Risso, 1826, *Physoscelus* Lepeletier & Brullè, 1835, and *Physoscelis* Westwood, 1840, *q.v.*[197]

Rubrica Parker, 1929. Proc. U. S. Nat. Mus., LXXV, art. 5, p. 53. [Three species.]

TYPE: *Monedula gravida* Handlirsch, 1890 [= *Rubrica gravida* (Handlirsch)]. (Original designation.)

[194] The spelling of the name in the generic description is given as *Ptigosphex* but all other mention of the genus as well as of the sole included species is given as *Ptygosphex*. Inasmuch as this paper is replete with typographical errors and *lapsus calami*, it would be well to adopt the spelling *Ptygosphex*, particularly since this is correct etymologically.

[195] *Vide* footnote 234 on *Tenila* Brèthes.

[196] *Vide* Bradley, 1934, Ent. News, XLV, pp. 273–274.

[197] *Vide* Pate, 1935, Ent. News, XLVI, p. 247.

Saliostethoides Arnold, 1924. Ann. Transvaal Mus., XI, p. 30.

TYPE: *Saliostethoides saltator* Arnold. (Original designation and monobasic.)

Saliostethus Brauns, 1896.[198] [In Kohl,] Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 448.

TYPE: *Saliostethus lentifrons* Brauns. (Monobasic.)

Scapheutes Handlirsch, 1887. Sitzber. Akad. Wiss., Wien, XCVI, p. 229.

TYPE: *Scapheutes Mocsaryi* Handlirsch. (Monobasic.)

Sceliphron Klug, 1801. N. Schrift. Ges. Naturf. Fr., Berlin, III, p. 561. [Five species.]

TYPE: *Sphex spirifex* Linnaeus, 1758 [= *Sceliphron spirifex* (L.) = *Sphex Aegyptia* Linnaeus, 1758[199] = *Sceliphron Aegyptium* (L.)]. (Designation of Bingham, 1897, Faun. Brit. Ind., Hymen., I, p. 235.)

Isogenotypic with *Pelopoeus* Latreille, 1802 and *Sceliphrum* Schulz, 1906, *q.v.*

Sceliphrum Schulz, 1906. Spolia Hymenopterologica, p. 192.

Emendation for, and isogenotypic with *Sceliphron* Klug, 1801, *q.v.*

Schistosphex Arnold, 1922. Ann. Transvaal Mus., IX, p. 137.

TYPE: *Schistosphex Breijeri* Arnold. (Original designation and monobasic.)

Scotomphales Vachal, 1900.[200] Bull. Soc. Ent. France, 1900, p. 233.

TYPE: *Omphalius niger* Vachal, 1899 [= *Scotomphales niger* (Vachal)]. (Monobasic.)

Isogenotypic with *Omphalius* Vachal, 1899 *nec* Philippi, 1847 *nec* Erichson, 1891, *q.v.*

Selman Parker, 1929. Proc. U. S. Nat. Mus., LXXV, art. 5, p. 20.

TYPE: *Selman angustus* Parker. (Original designation and monobasic.)

Sericogaster Westwood, 1835 [Sept.][201] *nec* Dejean, 1835 [Aug.]. Proc. Zool. Soc. London, III, p. 71.

TYPE: *Sericogaster fasciatus* Westwood. (Monobasic.)

Sericophorus Shuckard, 1840. Lardner's Cabinet Encyclopaed., VIII, p. 181. [Nomen nudum.]

[198] *Vide* Pate, 1935, Ent. News, XLVI, p. 248.

[199] Schulz (1912, Berlin. Ent. Zeitschr., LVIII, p. 56) is the authority for this synonymy.

[200] Proposed in lieu of *Omphalius* Vachal, 1899 *nec* Philippi, 1847.

[201] The identity of this Australian genus has remained a mystery ever since Westwood described it. When the type is found and examined it will in all probability be discovered to be congeneric with another genus already described and as a consequence I have refrained from proposing a new name for it.

Sericophorus Smith, 1851.[202] Ann. & Mag. Nat. Hist., (2), VII, p. 32.

TYPE: *Sericophorus chalybeus* Smith. (Monobasic.)

Isogenotypic with *Tachyrrhostus* Saussure, 1854, *q.v.*

Shestakovia Gussakovskij, 1930. Eos, VI, p. 275. [Six species.]

TYPE: *Shestakovia digitata* Gussakovskij [= *Eremiasphecium digitatum* (Gussakovskij)].[203] (Original designation.)

Silaon Piccioli, 1869.[209] Boll. Soc. Ent. Ital., I, p. 282.

TYPE: *Silaon compedita* Piccioli [= *Solierella compedita* (Piccioli)]. (Monobasic.)

Isogenotypic with *Ammosphecidium* Kohl, 1877, and *Sylaon* Kohl, 1884, *q.v.*

Simblephilus Jurine, 1801.[204] [In Panzer,] Erlang. Litt. Ztg., I, p. 164.

TYPE: *Philanthus pictus* Panzer, 1798 [= *Vespa triangulum* Fabricius, 1775 = *Philanthus triangulum* (F.)]. (Monobasic.)

Isogenotypic with *Symblephilus* Panzer, 1806 and *Simblephilus* Jurine, 1807, *q.v.*

Simblephilus Jurine, 1807.[206] Nouv. Méthod. Class. Hymén., p. 185.

TYPE: *Vespa triangulum* Fabricius, 1775 [= *Simblephilus triangulum* (F.) = *Philanthus triangulum* (F.)]. (Designation of Morice & Durrant, 1914,[205] Trans. Ent. Soc. Lond., p. 402.)

Isogenotypic with *Simblephilus* Jurine, 1801 and *Symblephilus* Panzer, 1806, *q.v.*

[202] Smith accredits this genus to Shuckard.

[203] *Vide* Pate, 1935, Ent. News, XLVI, p. 249.

[204] At the recent congress held in Lisbon, the Internation Commission on Zoological Nomenclature voted to suppress the "Erlangen List." See discussion of this name in Appendix I.

[205] Acceptance of Morice and Durrant as having designated the type of this may be open to question. I have chosen to give them the credit of doing so.

[206] See the discussions of these names in Morice & Durrant (1914, Trans. Ent. Soc. Lond., pp. 402, 408–410), Bradley (1919, Trans. Ent. Soc. Lond., pp. 61–62) and the remarks under *Simblephilus* Jurine, 1807 in Appendix I.

[207] If Saussure's conjecture that *Philanthus petiolatus* Spinola, 1841 is conspecific with *Trachypus Gomesii* Klug, 1810 is correct then *Simblephilus* Dahlbom, 1844 is isogenotypic with *Trachypus* Klug, 1810.

[208] Westwood's citation in 1840 (p. 80) of *Sphex vaga* L., may not be construed as a valid type fixation inasmuch as he specifically states that it is only an example. Indeed, were it considered valid, then *Solenius* Lepeletier & Brullè, 1835 would have to be regarded as isogenotypic with *Mellinus* Fabricius, 1790, since as Richards has recently pointed out (1935, Trans. R. Ent. Soc. London, LXXXIII, p. 169), the type of the latter—*Vespa arvensis* L., 1758—and *Sphex vaga* L., 1758 are merely opposite sexes of the same species. Nevertheless, *Sphex vaga* Auctt., has apparently by common consent been regarded as the type of *Solenius* although so far as I have been able to discover there is no definite statement to this effect prior to 1899 when Ashmead designated *Solenius*

Simblephilus Dahlbom, 1844 *nec* Jurine 1801 & 1807. Hymen. Europ., I, p. 190.

TYPE: *Philanthus petiolatus* Spinola, 1841 [207] [= *Simblephilus petiolatus* (Spinola) = *Trachypus petiolatus* (Spinola)]. (Monobasic.)

Solenius Lepeletier & Brullè, 1835.[208] Ann. Soc. Ent. France, III, p. 713. [Twelve species.]

TYPE: *Solenius interruptus* Lepeletier & Brullè [208] [= *Crabro* (*Lestica Solenius*) *interruptus* (Lepeletier & Brullè)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 167.)

Solierella Spinola, 1851.[209] [In Gay,] Hist. fis. pol. Chile, Zool., VI, p. 349.

TYPE: *Solierella miscophoides* Spinola. (Monobasic.)

Spalagia Shuckard, 1840.[210] Lardner's Cabinet Encyclopaed., VII, p. 181. [Nomen nudum.]

Spanolarra Cameron, 1900.[211] Ann. & Mag. Nat. Hist., (7), V, p. 32.

TYPE: *Spanolarra rufitarsis* Cameron [= *Leptolarra* (*Spanolarra*) *rufitarsis* (Cameron)[212] = *Motes* (*Spanolarra*) *rufitarsis* (Cameron)]. (Monobasic.)

Sphecienus Patton, 1879. Bull. U. S. Geol. Surv., V, p. 345.

TYPE: *Stizus nigricornis* Dufour, 1838 [= *Sphecienus nigricornis* (Dufour) = *Sphecius* (*Sphecienus*) *nigricornis* (Dufour)]. (Original designation.)

interruptus Lepeletier & Brullè, 1835 as type of *Solenius*, an action which has caused much criticism. Ashmead, however, was no doubt merely reflecting the opinion that Packard voiced thirty three years earlier when the latter in his "Revision of the Fossorial Hymenoptera of North America" (Proc. Ent. Soc. Philadelphia, VI, pp. 39 & 71, [1866]), stated in his discussion of *Crabro* that *Solenius interruptus* Lepeletier & Brullè was the type of his Group A which he virtually admitted was the same as *Solenius*. With the adoption of *interruptus* as type, it becomes necessary to transfer the name *Solenius* from the generic position it has hitherto been accorded to the rank of a mere subgenus of *Lestica* Billberg, 1820 [olim *Ceratocolus* Lepeletier & Brullè, 1835]. *Ectemnius* Dahlbom, 1845 will then have to be used for the group hitherto known as *Solenius* Lepeletier & Brullè, 1835.

[209] Rohwer (1911, Proc. U. S. Nat. Mus., XL, pp. 585–586) attempted to retain *Solierella* Spinola and *Silaon* Piccioli as discrete genera, principally on the basis of the relative degree of emargination on the lower edge of the mandibles, but I doubt if this will even serve as a good character for species groups. *Silaon* Piccioli and *Niteliopsis* S. S. Saunders may eventually prove to be worthy of subgeneric rank but the data now at hand do not incline me to think so. *Lautara* Herbst is in all probability congeneric with the typical species group of *Solierella*.

[210] Patton (1909, Ohio Nat., IX, p. 442) states that *Spalagia* is probably identical with *Acanthostethus* Smith, 1869.

[211] *Vide* discussion of *Motes* Kohl, 1896 in Appendix III.

[212] Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 164) is the authority for this synonymy.

Sphecius Dahlbom, 1844. Hymen. Europ., I, p. 154.

TYPE: *Sphex speciosus* Drury, 1773 [= *Sphecius speciosus* (Drury) = *S.* (*Sphecius*) *speciosus* (Drury)]. (Monobasic.)

Sphex Linnaeus, 1758.[213] Syst. Nat., (Ed. x), p. 569. [Twenty-five species.]

TYPE: *Sphex sabulosa* Linnaeus [= *S.* (*Sphex*) *sabulosus* (L.)]. (Designation of Fernald, 1905, Ent. News, XVI, p. 165; *v. et.* Opinion 32, International Commission on Zoological Nomenclature.)

Isogenotypic with *Ammophila* Kirby, 1798, *q.v.*

Sphodrotes Kohl, 1889. Ann. K. K. Naturhist. Hofmus., Wien, IV, p. 188.

TYPE: *Sphodrotes punctuosa* Kohl. (Monobasic.)

Spilomena Shuckard, 1838.[214] Trans. Ent. Soc. Lond., II, p. 79, footnote.

TYPE: *Stigmus troglodytes* Van der Linden, 1829 [= *Celia troglodytes* (Van der Linden) = *Spilomena troglodytes* (Van der Linden)]. (Designation of Shuckard, 1837, Essay Indig. Foss. Hymen., p. 182.)

Isogenotypic with *Celia* Shuckard, 1837, *nec* Zimmermann, 1832, *q.v.*

Steniolia Say, 1837. Boston Journ. Nat. Hist., I, p. 367.

TYPE: *Bembex longirostra* Say, 1837 [= *Steniolia longirostra* Say]. (Monobasic.)

Stenocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 216. [Three species.]

TYPE: *Crabro planipes* Fox, 1895 [= *Stenocrabro planipes* (Fox) = *Crabro* (*Crossocerus Stenocrabro*) *planipes* (Fox)]. (Original designation.)

Stenogorytes Schrottky, 1911. Ent. Rundschau, XXVIII, p. 28. [Four species.]

TYPE: *Megalomma melanogaster* Schrottky [= *Megalomma* (*Stenogorytes*) *melanogaster* Schrottky = *Megistommum melanogaster* (Schrottky)]. (Original designation.)

Stenomellinus Schulz, 1911.[215] Zool. Ann., IV, p. 142.

TYPE: *Psen dilectus* Saussure, 1892 [= *Stenomellinus dilectus* Saussure MS [in Schulz] = *Psenulus dilectus* (Saussure) = *D.* (*Diodontus*) *dilectus* (Saussure)]. (Monobasic.)

[213] *Vide* discussion of *Sphex* Linnaeus in Appendix II.

[214] Proposed in lieu of *Celia* Shuckard, 1837 *nec* Zimmermann, 1832.

[215] Schulz (1911, Zool. Ann., IV, p. 141–142) after an examination of Saussure's type of *Psen dilectus* in the Geneva Museum, states that it belongs to *Psenulus* Kohl, 1896, and then remarks further that ". . . Das zur Abbildung benutzte Mandibelpräparat trägt die Bezeichnung "*Stenomellinus dilectus* Sauss.," wonach es scheint, dass Saussure schon vor Kohl diese Formen als von *Psen* generisch verschieden erkannt hat: *Stenomellinus* Sauss. mag man als i. l.-Namen in die Synonymie von *Psenulus* setzen. . . ."

Stethorectus Smith, 1847. Ann. & Mag. Nat. Hist., (1), XX, p. 394.

TYPE: *Stethorectus ingens* Smith, 1847 [= *Dynatus Spinolae* Lepeletier, 1845 = *Podium nigripes* Westwood, 1832 [216] = *Podium* (*Dynatus*) *nigripes* (Westwood)]. (Monobasic.)

Isogenotypic with *Dynatus* Lepeletier, 1845, *q.v.*

Stictia Illiger, 1807.[218] [In Rossi,] Fauna Etrusca, II, p. 131.[217] [Five species.]

TYPE: *Bembex signata* Fabricius, 1781 [218] [= *Vespa signata* Linnaeus, 1758 = *Monedula signata* (L.) = *Stictia signata* (L.)]. (Designation of Latreille, 1810,[220] p. 438.)

Isogenotypic with *Monedula* Latreille, 1802 *nec* Linnaeus [in Hasselquist], 1762 [219] *nec* Moehring, 1758, *q.v.*

Stictiella Parker, 1917. Proc. U. S. Nat. Mus., LII, p. 21. [Twenty species.]

TYPE: *Monedula formosa* Cresson, 1872 [= *Stictiella formosa* (Cresson)]. (Original designation.)

Stigmus Panzer, 1804. Faun. Insect. German., hft. 86, no. 7.

TYPE: *Stigmus pendulus* Panzer. (Monobasic.)

Isogenotypic with *Antronius* Dalman [MS], 1840, *q.v.*

Stizoides Guérin-Méneville, 1844.[221] Iconogr. Règn. Anim., VII, Insect., p. 438. [Six species.]

TYPE: *Larra fasciata* Fabricius, 1798 [= [*Stizus* (*Stizoides*) *fasciatus* (F.)] = *Sphex assimilis* Fabricius, 1787 [222] = (*Stizus calopteryx* Handlirsch, 1892) = *Stizoides assimilis* (F.)]. (Designation of Parker, 1929, Proc. U. S. Nat. Mus., LXXV, art. 5, p. 10.)

I have been unable to find any published usage of the name *Stenomellinus* by Saussure; it must consequently be accredited to Schulz. *Psen dilectus* Saussure, however, belongs to the typical subgenus of *Diodontus* Curtis, 1834 rather than to *Psenulus* Kohl, 1896 as Schulz has contended.

[216] Kohl (1902, Abh. K. K. Zool.-Bot. Ges. Wien, I, hft. 4, p. 28) is the authority for this synonymy.

[217] Sherborn in the Index Animalium gives the following reference as the original proposition of *Stictia:* Illiger, 1807, Mag. f. Insektenkund., VI, p. 195. The same five species are included as in the Fauna Etrusca.

[218] *Vide* footnote 29 on *Bembex* Fabricius, 1777.

[219] Illiger was aware that Latreille's name was a homonym of Linnaeus' genus and consequently proposed *Stictia* in lieu of it. See, however, footnotes 135 and 136 on *Monedula* Latreille, 1802.

[220] Latreille designated the type of *Monedula* Latreille, 1802 and thus *ipso facto* fixed the type of *Stictia* (*cf.* art. 30, II, f).

[221] *Vide* discussion of *Stizus* Latreille, 1802 in Appendix II.

[222] Schulz (1912, Berlin. Ent. Zeitschr., LVIII, p. 78) is the authority for this synonymy.

Stizolarra Saussure, 1887.[223] Soc. Entom., II, p. 9. [Fifteen species.]

TYPE: *Sphex vespiformis* Fabricius, 1775 [= *Stizolarra vespiformis* (F.) = *S.* (*Stizus*) *vespiformis* (F.)]. (Present designation.)

Isogenotypic with *Larra* Smith, 1856 *nec* Fabricius, 1793, *q.v.*

Stizomorphus A. Costa, 1859.[224] Faun. Regn. Napoli, Imen. Aculeat., Nyssonid., p. 7.

TYPE: *Vespa tridens* Fabricius, 1781 [= *Stizomorphus tridens* (F.) = *Bembecinus tridens* (F.)]. (Monobasic.)

Isogenotypic with *Gorystizus* Minkiewicz, 1934, *q.v.*

Stizus Latreille, 1802.[225] Hist. Nat. Crust. Insect., III, p. 344. [Two species.]

TYPE: *Larra ruficornis* Fabricius, 1805 [= *Bembex ruficornis* Fabricius, 1787 = *Stizus ruficornis* (F.) = *S.* (*Stizus*) *ruficornis* (F.)]. (Designation of Latreille, 1810, p. 438.)

Sylaon Kohl, 1884. Verh. Zool.-Bot. Ges., Wien, XXXIV, p. 209.

Emendation for, and isogenotypic with *Silaon* Piccioli, 1869, *q.v.*

Symblephilus Panzer, 1806.[226] Krit. Rev. Insektenf. Deutschl., II, p. 171. [Fourteen species.]

TYPE: *Philanthus pictus* Panzer, 1799 [= *Vespa triangulum* Fabricius, 1775 = *Philanthus triangulum* (F.)]. (Present designation.)

Isogenotypic with *Simblephilus* Jurine, 1801 and 1807, *q.v.*

Synneurus A. Costa, 1859. Faun. Regn. Napoli, Imen. Acul., Nyssonid., p. 16.

TYPE: *Synneurus procerus* A. Costa, 1859 [= *Nysson epeoliformis* Smith, 1856 = *Nysson* (*Synneurus*) *epeoliformis* (Smith)]. (Monobasic.)

Synorhopalum Ashmead, 1899. Canad. Entom., XXXI, p. 218.

TYPE: *Crabro decorus* Fox, 1895 [= *Synorhopalum decorum* (Fox) = *Rhopalum decorum* (Fox) = *Euplilis decorus* (Fox)]. (Original designation and monobasic.)

Synothyreopus Ashmead, 1899. Canad. Entom., XXXI, p. 213. [Eight species.]

TYPE: *Crabro tumidus* Packard, 1867 [= *Synothyreopus tumidus* (Packard) = *C.* (*Crabro Synothyreopus*) *tumidus* (Packard)]. (Original designation.)

[223] Proposed in lieu of *Larra* Smith, 1856 *nec* Fabricius, 1793.

[224] *Vide* footnote 28 on *Bembecinus* Costa. It may eventually prove possible to retain *Stizomorphus* as a subgenus but at present it scarcely seems desirable to do so.

[225] *Vide* discussion of *Stizus* Latreille in Appendix II.

[226] Panzer lists a *Symblephilus*, which he accredits to Jurine, as a synonym of *Philanthus* Fabricius. See discussion of this under *Simblephilus* Jurine, 1807 in Appendix I.

Tachybulus Latreille, 1809. Gen. Crust. Insect., IV, p. 75.

TYPE: *Tachybulus niger* Latreille, 1809 [= *Alyson ater* Spinola, 1808 = *P.* (*Pison*) *atrum* (Spinola)]. (Monobasic.)

Isogenotypic with *Pison* Jurine, 1808, and *Pisum* Schulz. 1906 *nec* Megerle, 1811, *q.v.*

Tachyptera Dahlbom, 1844 *nec* Berge, 1842. Hymen. Europ., I, p. 133. [Two species.]

TYPE: *Apis obsoleta* Rossi, 1792 [227] [= *Tachytes* (*Tachyptera*) *obsoleta* (Rossi) = *Tachytes obsoletus* (Rossi)]. (Designation of Patton, 1880, Proc. Boston Soc. Nat. Hist., XX, p. 391.)

Tachyrrhostus Saussure, 1854. Mem. Soc. Phys. Hist. Nat. Geneve, XIV, 1, p. 24. [Two species.]

TYPE: *Tachyrrhostus cyaneus* Saussure, 1854 [228] [= *Sericophorus chalybeus* Smith, 1851]. (Present designation.)

Isogenotypic with *Sericophorus* Smith, 1856, *q.v.*

Tachysphex Kohl, 1883.[229] Deutsch. Ent. Zeitschr., XXVII, p. 166. [*ca.* twenty-five species.]

TYPE: *Tachysphex filicornis* Kohl. (Designation of Bingham, 1897, Faun. Brit. Ind., Hymen., I, p. 192.)

Tachystizus Minkiewicz, 1934.[230] Polski Pismo Ent., XII, p. 251. [Fourteen species.]

TYPE: *Crabro tridentatus* Fabricius, 1775 [= *Stizus* (*Tachystizus*) *tridentatus* (F.) = *Stizoides tridentatus* (F.)]. (Present designation.)

[227] According to Kohl (1883, Verh. Zool.-Bot. Ges. Wien., XXXIII, p. 38; and 1884, *idem*, XXXIV, p. 338) *Tachytes* (*Tachyptera*) *obsoleta* Dahlbom, 1844 is not *Apis obsoleta* Rossi, 1792 but rather *Pompilus tricolor* Panzer, 1801. The latter, moreover, Kohl contends is not *Pompilus tricolor* Fabricius, 1798 [= *Sphex tricolor* Fabricius, 1793 *nec* Schrank, 1781] and consequently proposes *Tachytes europaea* as a new name for *Pompilus tricolor* Panzer, 1801 *nec* Fabricius, 1798. Thus if we follow Kohl, *Tachyptera* Dahlbom, 1844 is isogenotypic with *Tachytes* Panzer, 1806. However, although the course taken by Kohl at that time was without doubt probably justifiable, it is now nevertheless more or less in direct contravention to Opinion 65. The case might be ultimately solved by submitting it to the commission for adjudication but inasmuch as *Tachyptera* Dahlbom, 1844 is a homonym in any event, I scarcely see the necessity of doing this. The case of *Tachytes* Panzer, 1806 closely parallels this one.

[228] Saussure (1854, Melang. Hymen., fasc. I, p. 69) states that *Tachyrrhostus cyaneus* Saussure, 1854 is the same as *Sericophorus chalybeus* Smith, 1851 and that his genus *Tachyrrhostus* is the same as Smith's *Sericophorus*.

[229] *Vide* footnote 103 on *Lara* Drapiez, 1819.

[230] If the designation of Latreille, 1810 of *Bembex ruficornis* Fabricius as type of *Stizus* Latreille is not accepted, then *Tachystizus* Minkiewicz, 1934 is isogenotypic with *Stizus* Latreille, 1802. See, however, the discussion of *Stizus* in Appendix II.

Tachytella Brauns, 1906. Verh. Zool.-Bot. Ges. Wien, LVI, p. 56.

TYPE: *Tachysphex* (*Tachytella*) *aureo-pilosa* Brauns [= *Tachytella aureo-pilosa* (Brauns)]. (Monobasic.)

Tachytes Panzer, 1806. Krit. Rev. Insektenf. Deutschl., II, p. 129.

TYPE: *Tachytes tricolor* Panzer, 1806 [231] [= *Pompilus tricolor* Panzer, 1801 = *Pompilus tricolor* Fabricius, 1798 = *Sphex tricolor* Fabricius, 1793 *nec* Schrank, 1781 = *T.* (*Tachytes*) *tingitanus* new name]. (Monobasic.)

Talthybius Rafinesque, 1815. Analyse de la Nature ou Tab. Univ., p. 124. [No species.]

Proposed as a new name for, and isogenotypic with *Podium* Fabricius, 1805, *q.v.*; *v. et.*, *Parapodium* Taschenberg, 1869.

Tanyoprymnus Cameron, 1905. Trans. Amer. Ent. Soc., XXXI, p. 375.

TYPE: *Tanyoprymnus longitarsis* Cameron, 1905 [= *Gorytes moneduloides* Packard, 1866 = *Ammatomus* (*Tanyoprymnus*) *moneduloides* (Packard)].[232] (Monobasic.)

Isogenotypic with *Ceratostizus* Rohwer, 1921, *q.v.*

Taranga W. F. Kirby, 1883. Trans. Ent. Soc. Lond., 1883, p. 201.

TYPE: *Taranga dubia* Kirby, 1883 [= *Pison Spinolae* Shuckard, 1837 [233] = *P.* (*Pison*) *Spinolae* (Shuckard)]. (Monobasic.)

[231] Panzer in his original description of *Tachytes* refers to his figure in the Faunae Insectorum Germanicae (Hft. 86, Fig. 19) stating in both 1806 and 1801 that the insect he figures is *Pompilus tricolor* Fabricius, 1798 [= *Sphex tricolor* F., 1793 *nec* Schrank, 1781]. However, the insect Panzer figured in 1801 obviously disagrees with Fabricius' original description and this led Kohl (1883, Verh. Zool.-Bot. Ges. Wien, XXXIII, p. 37) to propose *Tachytes europaea* as a new name for *Pompilus tricolor* Panzer, 1801 *nec* Fabricius, 1798. *Pompilus tricolor* Fabricius, 1798 [= *Sphex tricolor* F., 1793 *nec* Schrank, 1781] was retained by Kohl for another species of *Tachytes*. Although Kohl was indubitably justified in taking this action then, nevertheless it is a debatable point whether this procedure is now in strict conformity with the zoological code as expressed in Opinion 65. This is a case of obvious misidentification, for Panzer apparently based his genus upon certain definite specimens. Under the circumstances, therefore, it might be well to submit this case with full details to the Commission as they suggest in Opinion 65. This would necessitate an examination and comparison of Panzer's original material with the type of *Sphex tricolor* Fabricius, 1793—a task which I am not at present in a position to undertake. However, I am of the opinion that *Sphex tricolor* Fabricius, 1793 must be considered the type of *Tachytes* Panzer, 1806, regardless of Panzer's misidentification. If this principle is not adhered to then our generic nomenclature will continue to be mired in a nomenclatorial bog. Moreover, if it is impossible to accept an author's designation of type for his own genus—for in this case it amounts to that—how may we logically accept later type designations by others?

Sphex tricolor Fabricius, 1793 (Syst. Ent., II, p. 215) is a homonym of *Sphex tricolor* Schrank, 1781 (Enum. Insect. Aus., p. 383), consequently I have proposed *Tachytes tingitanus* for Fabricius' species. (See p. 4.)

[232] *Vide* Pate (1935, Ent. News, XLVI, p. 249) for a discussion of this synonymy.

[233] Turner (1916, Proc. Zool. Soc. Lond., p. 607) is the authority for this synonymy.

Tenila Brèthes, 1913.[234] An. Mus. Nac. Hist. Nat. Buenos Aires, XXIV, p. 153.

TYPE: *Nitela amazonica* Ducke, 1903[234] [= *Tenila amazonica* (Ducke).] (Original designation.)

Therapon Parker, 1929 *nec* Cloquet, 1819, *nec* Cuvier & Valenciennes, 1829, *nec* Bonaparte, 1832. Proc. U. S. Nat. Mus., LXXV, art. 5, p. 12.

TYPE: *Stictia chilensis* Eschscholz, 1822 [= *Therapon chilensis* (Esch.) = *Zyzzyx chilensis* (Esch.)]. (Original designation.)

Isogenotypic with *Zyzzyx* new name, *q.v.*

Thyreocerus A. Costa, 1871. Ann. Mus. Zool. Napoli, VI, p. 65.

TYPE: *Crabro crassicornis* Spinola, 1808 [= *Thyreocerus crassicornis* (Spinola) = *Crabro* (*Ectemnius Thyreocerus*) *crassicornis* (Spinola)]. (Monobasic.)

Thyreocnemus A. Costa, 1871. Ann. Mus. Zool. Napoli, VI, p. 64.

TYPE: *Thyreocnemus pugillator* A. Costa [= *C.* (*Crabro Thyreocnemus*) *pugillator* (Costa)]. (Monobasic.)

Thyreopus Lepeletier & Brullè, 1835. Ann. Soc. Ent. France, III, p. 751. [Five species.]

TYPE: *Vespa cribraria* Linnaeus, 1758 [= *Thyreopus cribrarius* (L.) = *C.* (*C. Crabro*) *cribrarius* (L.)]. (Designation of Ashmead, 1899,[235] Canad. Entom., XXXI, p. 213.)

Isogenotypic with *Crabro* Fabricius, 1775 *nec* Geoffroy, 1762 and *Pemphilis* Risso, 1826,[236] *q.v.*

Thyreosphex Ashmead, 1904. Canad. Entom., XXXVI, p. 282.

TYPE: *Thyreosphex stantoni* Ashmead [= *Dolichurus stantoni* (Ashmead)].[237] (Monobasic.)

Thyreus Lepeletier & Brullè, 1835 *nec* Panzer, 1806. Ann. Soc. Ent. France, III, p. 761.

TYPE: *Crabro vexillatus* Panzer, 1798 [= (*Thyreus vexillatus* (Panzer) =) *Apis clypeata* Schreber, 1759 = *Crabro* (*Ceratocolus Thyreus*) *clypeatus* (Schreber) = *Crabro* (*Lestica Clypeocrabro*) *clypeatus* (Schreber)]. (Monobasic.)

Isogenotypic with *Clypeocrabro* Richards, 1935, *q.v.*

[234] Although I have seen no material of Ducke's species, nevertheless his original description together with that of Brèthes has led me to conclude that *Rhinonitela* Williams, 1928 is in all probability congeneric with *Tenila* Brèthes, 1913.

[235] Westwood in 1840 (p. 80) gave *Sphex cribraria* L., as an example, not as a typical species.

[236] For a discussion of this synonymy, see Pate, 1935, Ent. News, XLVI, p. 245.

[237] Rohwer (1910, Proc. U. S. Nat. Mus., XXXVII, p. 659) is the authority for this synonymy.

Tracheliodes Morawitz, 1866. Bull. Acad. Sci. St. Petersbourg, IX, p. 249. [Four species.]

TYPE: *Brachymerus Megerlei* Dahlbom, 1845 [= *Crabro* (*Tracheliodes*) *Megerlei* (Dahlbom) = *Crabro* (*Crossocerus*) *curvitarsis* Herrich-Schaeffer, 1841 = *Tracheliodes curvitarsis* (Herrich-Schaeffer)]. (Designation of Ashmead, 1899, Canad. Entom., XXXI, p. 219.)

Isogenotypic with *Brachymerus* Dahlbom, 1845 *nec* Chevrolat, 1835 & 1841, *q.v.*

Trachelosimus Morawitz, 1866. Bull. Acad. Sci. St. Petersbourg, IX, p. 249.

TYPE: *Crabro armatus* Van der Linden, 1829 [= *Crabro* (*Trachelosimus*) *armatus* (Van der Linden) = *Lindenius armatus* (Van der Linden)]. (Monobasic.)

Trachypus Klug, 1810. Mag. Ges. Naturf. Freund., Berlin, IV, p. 41.

TYPE: *Trachypus Gomesii* Klug.[238] (Monobasic.)

Trichogorytes Rohwer, 1912.[239] Proc. U. S. Nat. Mus., XLI, p. 469.

TYPE: *Trichogorytes argenteopilosus* Rohwer. (Original designation and monobasic.)

Trichostictia Parker, 1929. Proc. U. S. Nat. Mus., LXXV, art. 5, p. 14. [Three species.]

TYPE: *Monedula vulpina* Handlirsch, 1890 [= *Trichostictia vulpina* (Handlirsch)]. (Original designation.)

Trigonopsis Perty, 1833. Delect. Animal. Art. Brasel., p. 142.

TYPE: *Trigonopsis abdominalis* Perty [= *Podium* (*Trigonopsis*) *abdominale* (Perty)]. (Monobasic.)

Trirogma Westwood, 1842.[240] Trans. Ent. Soc. Lond., III, p. 223.[241]

TYPE: *Trirogma caerulea* Westwood. (Monobasic.)

[238] *Vide* footnote 207 on *Simblephilus* Dahlbom, 1844.

[239] Rohwer in 1921 (Proc. U. S. Nat. Mus., LIX, p. 412) gives the spelling of this name as *Trichiogorytes* but this may be regarded as merely a characteristic *lapsus calami.*

[240] Agassiz in 1846 emended this name to *Trirhogma* in the Index Universalis of his Nomenclator Zoologicus and most subsequent authors have used this orthography.

[241] On December 7, 1840 Westwood read a paper containing the descriptions of his new genera *Trirogma* and *Aphelotoma* before the Entomological Society of London and on page 16 of the first number of the Journal of the Proceedings of the Society for this year, issued sometime in 1841, a short description of each genus with its sole included species was given. Sherborn in the Index Animalium gives this as the first and earliest description in print of these two genera. However, although I have examined several sets of the Entomological Society of London's Transactions and Proceedings, all I have seen have only the 1864 reprint of the Journal of the Proceedings for this period and these are bound in the back of volume IV which covers the years 1845–1847. Sherborn also

Trypargilum Richards, 1935. Trans. R. Ent. Soc. Lond., LXXXII, p. 191. [Seventy-seven species.]

TYPE: *Trypoxylon nitidum* Smith, 1856 [= *Trypoxylon* (*Trypargilum*) *nitidum* (Smith)]. (Original designation.)

Trypoxylon Latreille, 1796.[242] Prec. Charac. Gen. Insect., p. 121. [No species.] 1802. Hist. Nat. Crust. Insect., III, p. 338.

TYPE: *Sphex figulus* Linnaeus 1758 [= *Trypoxylon figulus* (L.) = *T.* (*Trypoxylon*) *figulum* (L.)]. (Monobasic, fixed by Latreille, 1802, *l.c.*)

Isogenotypic with *Apius* Jurine, 1801 and 1807, *Apius* Panzer, 1806, and *Trypoxylum* Schulz, 1906, *q.v.*

Trypoxylum Schulz, 1906.[243] Spolia Hymenopterologica, p. 212.

Emendation for, and isogenotypic with *Trypoxylon* Latreille, 1796, *q.v.*

Waagenia Kriechbaumer, 1874. Stettin. Ent. Ztg., XXXV, p. 55.

TYPE: *Waagenia sikkimensis* Kriechbaumer [= *Ampulex sikkimensis* (Kriechbaumer)].[244] (Monobasic.)

Xenocrabro Perkins, 1902. Trans. Ent. Soc. Lond., 1902, p. 148.

TYPE: *Crabro unicolor* Smith, 1856 *nec* Panzer, 1798 [245] [= *Xenocrabro unicolor* (Smith) = *Crabro* (*Ectemnius Xenocrabro*) *nesiotes* new name]. (Original designation.)

Xestocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 169. [Three species.]

TYPE: *Crabro sexmaculatus* Say, 1824 *nec* Olivier, 1791 [= (*Xestocrabro sexmaculatus* (Say) =) *Crabro sayi* Cockerell, 1910 = *Crabro* (*Ectemnius Hypocrabro*) *sayi* (Cockerell)]. (Original designation.)

refers to the Annals and Magazine of Natural History, Volume VII, page 142 which appeared in April 1841. This reference I have seen and found to be essentially the same as the summary which appeared in the Journal of the Proceedings of the Entomological Society. Although the latter reference indubitably antedates the reference I have given above, I have chosen the one given because it contains the full descriptions, remarks and figures of these two genera.

[242] The following variations in spelling of the name *Trypoxylon* have been noted in the works of various authors: *Tripoxilon*, *Trupoxilon*, *Trupoxylon*, *Trypoxilon*. Inasmuch as the names are almost invariably accredited to Latreille, they may be all regarded as typographical errors or *lapsus calamorum*.

[243] Agassiz in his Index Universalis of 1846 was actually the first to emend *Trypoxylon* to this form.

[244] Kohl (1893, Ann. K. K. Naturhist. Hofmus., Wien, VIII, pp. 456 & 462) is the authority for this synonymy.

[245] For *Crabro unicolor* Smith, 1856 [Catal. Hymen. Brit. Mus., IV, p. 421] *nec* Panzer, 1798 [Faun. Insect. German., hft. 50, no. 24], I have proposed *Crabro nesiotes* new name. (See p. 4.)

Xylocelia Rohwer, 1915.[246] Proc. U. S. Nat. Mus., XLIX, p. 243.

TYPE: *Diodontus occidentalis* Fox, 1892 [= *Xylocelia occidentalis* (Fox)]. (Original designation.)

Xylocrabro Ashmead, 1899. Canad. Entom., XXXI, p. 169.

TYPE: *Crabro stirpicola* Packard, 1866 [= *Xylocrabro stirpicola* (Packard) = *Crabro* (*Ectemnius Hypocrabro*) *stirpicola* (Packard)]. (Original designation.)

Xyloecus Shuckard, 1837 *nec* Serville, 1833. Essay Indig. Foss. Hymen., Conspect. Gen., no. 25. [No species.]

TYPE: *Pemphredon insignis* Van der Linden, 1829 [= *P.* (*Passaloecus*) *insignis* (Van der Linden)]. (Designation of Shuckard, 1837, *op. cit.*, p. 188.)

Isogenotypic with *Passaloecus* Shuckard, 1837 and *Heroecus* Verhoeff, 1890, *q.v.*

Zanysson Rohwer, 1921.[247] Proc. U. S. Nat. Mus., LIX, p. 404. [Four species.]

TYPE: *Nysson texanus* Cresson, 1872 [= *Nysson* (*Zanysson*) *texanus* (Cresson) = *Zanysson texanus* (Cresson)]. (Original designation.)

Zoyphidium new name for *Zoyphium* Kohl, 1893 *nec* Agassiz, 1846 *nec* Motschulsky, 1850.[248]

TYPE: *Zoyphium sericeum* Kohl, 1893 [= *Zoyphidium sericeum* (Kohl)]. (Present designation.)

Isogenotypic with *Zoyphium* Kohl, 1893 *nec* Agassiz, 1846 *nec* Motschulsky, 1850, *q.v.*

Zoyphium Kohl, 1893 *nec* Agassiz, 1846 *nec* Motschulsky, 1850.[248] Verh. Zool.-Bot., Ges. Wien, XLIII, p. 569.

TYPE: *Zoyphium sericeum* Kohl [= *Zoyphidium sericeum* (Kohl)]. (Monobasic.)

Isogenotypic with *Zoyphidium* new name, *q.v.*

Zyzzyx new name for *Therapon* Parker, 1929 [249] *nec* Cloquet, 1819.

TYPE: *Stictia chilensis* Eschscholz, 1822 [= *Therapon chilensis* (Eschscholz) = *Zyzzyx chilensis* (Eschscholz)]. (Present designation.)

Isogenotypic with *Therapon* Parker, 1929 *nec* Cloquet, 1819, *q.v.*

[246] Proposed for *Diodontus* Auctt., *nec* Curtis, 1834.

[247] Proposed for *Paranysson* Auctt., *nec* Guerin, 1844.

[248] Agassiz (1846, Nomencl. Zool. Ind. Univ., p. 393) proposed *Zoyphium* as an emendation for *Zuphium* Latreille, 1806; Motschulsky (1850, Käf. Russl., VIII), and Bedel (1914, Catal. rais. Col. N. Afr., I, p. 295) have likewise employed this orthography for Latreille's name.

[249] Proc. U. S. Nat. Mus., LXXV, art. 5, p. 12, (1929).

The following genera have been erroneously ascribed to the Sphecidae:

Aphanilopterus Meunier, 1888.	See Pompilidae.
Ceropales Latreille, 1796.	" Pompilidae.
Dryinus Fabricius, 1805.	" Dryinidae.
Irenangelus Schulz, 1906.	" Pompilidae.
Liopteron Perty, 1833.	" Cynipidae.
Liphanthus Reed, 1894.	" *Psaenythia* Gerstaecker, 1869 in Andrenidae.
Neolarra Ashmead, 1900.	" Megachilidae.
Pseudapis Kirby, 1900.	" *Nomia* Latreille, 1804 in Andrenidae.
Xanthampulex Schulz, 1906.	" Pompilidae.

Appendix I

Morice and Durrant [250] in 1914 called attention to an anonymous pamphlet dealing with the generic classification of the Hymenoptera, which appeared in the year 1801 under the title "Nachrickt von einem neuen entomolischen [sic!] Werke, des Hrn. Prof. Jurine in Geneve" and which is commonly known as the "Erlangen List." Since its discovery, this paper has been the subject of considerable controversy inasmuch as it raised many nomenclatorial problems that involved the validity of numerous generic names. It is not my intention to discuss this paper *in extenso* here; that task has already been very ably accomplished by Morice and Durrant,[250] and Bradley.[251] However, inasmuch as the International Commission on Zoological Nomenclature at the recent Zoological Congress

[250] Morice, F. D. and J. H. Durrant. The authorship and first publication of the "Jurinean" Genera of Hymenoptera: Being a reprint of a long-lost work by Panzer, with a translation into English, an Introduction, and Bibliographical and Critical Notes. (Trans. Ent. Soc. Lond., 1914, pp. 339–436.)

Morice, F. D. Further notes on the "Jurinean" Genera of Hymenoptera, correcting errors and omissions in a paper on that subject published in the Trans. Ent. Soc. Lond. 1914, pp. 339–436. (Trans. Ent. Soc. Lond., 1916, pp. 432–442.)

[251] Bradley, J. C. The synonymy and types of certain genera of Hymenoptera, especially those discussed by the Rev. F. D. Morice and Mr. Jno. Hartley Durrant in connection with the long-forgotten "Erlangen List" of Panzer and Jurine. (Trans. Ent. Soc. Lond., 1919, pp. 50–75.)

held in Lisbon during September 1935, proposes [252] by virtue of the plenary powers conferred upon it to declare that the "Erlangen List" is to be treated as though it had never been published, it is now necessary to determine what may be regarded as the first valid proposal of the generic names first given in this work, or, as in the case of the genera proposed without exponents by Latreille in his Precis of 1796, what may be considered the first valid citation of species in connection with them. It is a relatively familiar fact that the "Erlangen List" was merely a pre-review by Panzer of Jurine's "Nouvelle Méthode de classer les Hyménoptères" which did not appear until 1807. In the interval between 1801 and the actual appearance of the "Nouvelle Méthode" six years later, Panzer adopted and formally characterized many of the genera proposed there for the first time, always accrediting them, nevertheless, to Jurine. Despite Panzer's good intentions on this score, the generic names in all such cases however, must be accredited to Panzer rather than to Jurine.

The "Erlangen List" contains the names of nineteen genera of Sphecoid wasps of which the following, since they are in nowise affected, are not discussed here: *Sphex* Linnaeus, 1758, *Larra* Fabricius, 1793, *Bembex* Fabricius, 1777, *Mellinus* Fabricius, 1790, *Crabro* Fabricius, 1775, and *Philanthus* Fabricius, 1790. The remaining thirteen are discussed briefly below in the order in which they appear in the "Erlangen List."

PSEN Latreille, 1796 [253]

This genus, originally proposed by Latreille [253] in 1796 without exponents, had species associated with it for the first time in the "Erlangen List." In this paper,[254] but one species is given, *Sphex atra* Fabricius, 1793, the same one which Latreille subsequently in 1802 [255] gave as the sole example of *Psen*, and thus automatically fixed as type of the genus. By 1810, however, Latreille had apparently changed his mind, for in that year he selected [256] *Try-*

[252] Ent. Rec., XLVII, p. 116, (1935); Science, LXXXIII, p. 552, (1936); Canad. Entom., LXVIII, p. 114, (1936).

[253] Prec. Charac. Gen. Insect., p. 122, (1796).

[254] Erlang. Litt. Ztg., I, p. 163, (1801).

[255] Hist. Nat. Crust. Insect., III, p. 338, (1802).

[256] Consid. Gén., Tabl., p. 438, (1810).

poxylon atratum Fabricius, 1805 [= ?*Sphex pallipes* Panzer, 1798], but since this was not a species first cited in connection with the name *Psen*, this designation must be regarded as invalid. *Trypoxylon atratum* F. is the type of *Diodontus* Curtis, 1834 *nec* Auctt.

STIGMUS Panzer, 1804 [257]

In the "Erlangen List" [254] this name is a nomen nudum. The first subsequent valid proposal of the name was given by Panzer [257] in 1804, with but one species included, *Stigmus pendulus* Panzer, 1804, which thus becomes the type by monotypy.

APIUS Panzer, 1806 [258]

The first mention of *Apius* subsequent to the "Erlangen List," [254] was in 1806 by Panzer [258] who recorded it as a synonym of *Trypoxylon* Latreille, 1796, stating, however, that it might form a group [subgenus?] of *Trypoxylon* in which he placed but one species, *Sphex figulus* Panzer [= *Sphex figulus* Linnaeus, 1758]. The following year Jurine characterized *Apius* [259] and placed three species in it, but admitted that his *Apius* was the same as Latreille's *Trypoxylon*. Morice and Durrant [260] in 1914 may be regarded as having designated *Sphex figulus* L., 1758 as type of *Apius* Jurine, 1807, thus making this name isogenotypic with *Apius* Panzer, 1806 and *Trypoxylon* Latreille, 1796.

DIMORPHA Panzer, 1806 [261]

The name *Dimorpha* must be accredited to Panzer [261] who in 1806 characterized the genus and included in it the same species which was likewise given as sole example in the "Erlangen List," [254] *Tiphia abdominalis* Panzer, 1798 [= *Sphex boops* Schrank, 1781 = *A.* (*Astata*) *boops* (Schrank)], which thus becomes the type by monotypy. Inasmuch as this same species is the type of *Astata* Latreille, 1796, *Dimorpha* Panzer, 1806 falls as an absolute synonym of that genus.

[257] Faun. Insect. German., hft. 86, no. 7, (1804).
[258] Krit. Rev. Insektenf. Deutschl., II, p. 106, (1806).
[259] Nouv. Méthod. class. Hymén., p. 140, (1807).
[260] Trans. Ent. Soc. Lond., 1914, p. 394, (1914).
[261] Krit. Rev. Insektenf. Deutschl., II, p. 126, (1806).

SIMBLEPHILUS Jurine, 1807 [263]

Apparently the first valid use of this name subsequent to the "Erlangen List" [262] was by Jurine in the Nouvelle Méthode,[263] where he characterized the genus quite fully and included in it six species. Apparently the first fixation of a type of this name must be accredited to Morice and Durrant [264] who in 1914 selected *Vespa triangulum* Fabricius, 1787 [= *Simblephilus triangulum* (F.) Jurine, 1807]. According to Bradley,[265] *Simblephilus* Jurine, 1801, of which *Simblephilus* Jurine, 1807 is an absolute synonym, is isogenotypic with *Philanthus* Fabricius, 1790. However, as indicated in Appendix II, the type of the latter is *Philanthus coronatus* Fabricius, 1790. Thus *Simblephilus* Jurine, 1807 and *Philanthus* Fabricius, 1790 are merely congeneric.

Panzer [266] in his Kritische Revision of 1806 lists as a synonym of *Philanthus* F., a *Symblephilus* which he accredits to Jurine and which is probably only a typographical error or *lapsus calami* for *Simblephilus*. Panzer lists fourteen species under *Symblephilus* [= *Philanthus* F.], and of these I select here the second, *Philanthus pictus* Panzer, 1798 [= *Vespa triangulum* Fabricius, 1787 = *Philanthus triangulum* (F.)], as type of *Symblephilus* Panzer, 1806 which thus becomes isogenotypic with *Simblephilus* Jurine, 1807.

ARPACTUS Panzer, 1805 [269]

In the "Erlangen List" as exponents of *Arpactus*,[262] two species are given: *Mellinus mystaceus* F[abricius, 1790 = *Sphex mystacea* Linnaeus, 1761] and *Mellinus quinquecinctus* [Fabricius, 1793]. Morice and Durrant [267] in 1914 fixed the first of these, *Sphex mystacea* Linnaeus, 1761, as type of *Arpactus* Jurine, 1801.

The next familiar use of the name *Arpactus* was by Panzer in his Kritische Revision [268] of 1806, but there is presumptive evidence that he antedated this usage of the name in the Faunae Insectorum

[262] Erlang. Litt. Ztg., I, p. 164, (1801).
[263] Nouv. Méthod., pp. 185–188, (1807).
[264] Trans. Ent. Soc. Lond., 1914, p. 402, (1914).
[265] Trans. Ent. Soc. Lond., 1919, p. 61, (1919).
[266] Krit. Rev. Insektenf. Deutschl., II, p. 171, (1806).
[267] Trans. Ent. Soc. Lond., 1914, p. 405, (1914).
[268] Krit. Rev. Insektenf. Deutschl., II, p. 164, (1806).

Germanicae [269] where he employed *Arpactus* as the name of a subgenus of *Mellinus* for *Mellinus quadrifasciatus* Fabricius, 1805. In the Kritische Revision, Panzer includes six species in *Arpactus: Mellinus mystaceus* Panzer, 1798 [= *Sphex mystacea* Linnaeus, 1761], *Mellinus arenarius* Panzer, 1798 [= *Sphex arenaria* Linnaeus, 1758], *Mellinus quadrifasciatus* Panzer, 1805–6 [= *Mellinus quadrifasciatus* Fabricius, 1805], *Mellinus quinquefasciatus* Panzer, 1798, *Mellinus quinquecinctus* Panzer, 1799 [= *Mellinus quinquecinctus* Fabricius, 1793], and *Mellinus dissectus* Panzer, 1801. Immediately following the name of each one of these species, Panzer refers to a plate and a figure in the Faunae Insectorum Germanicae, all of which, save that of *Mellinus quadrifasciatus* Fabricius, are now known to have been published prior to 1805. *Mellinus quadrifasciatus* F., the synonymical record of which has by an unfortunate but obvious typographical error been transferred to the following species, *Mellinus quinquefasciatus* Panzer, is followed by a reference to heft 98, figure 17 in the Faunae Insectorum Germanicae. Most authors and bibliographers have stated that this heft was not published until 1809, but Sherborn [270] has indicated that it was probably issued in 1805, qualifying his statement by adding ". . . although these dates are not absolutely exact, they may be relied upon for any practical purposes. . . ." Consequently, in view of this, and of Panzer's reference to it in his Kritische Revision, it is fairly safe to assume that this heft was issued prior to the Kritische Revision. The name *Arpactus*, therefore, must date from Panzer's Faunae Insectorum Germanicae, heft 98, fig. 17, published sometime during 1805 or early 1806, where it was used as a subgenus of *Mellinus* with but one species included, *Mellinus* (*Arpactus*) *quadrifasciatus* Fabricius, 1805, which thus automatically becomes the type.

However, later authors such as Van der Linden, Lepeletier, and Shuckard state that Panzer was mistaken in the species he had in front of him when the plate for the Faunae Insectorum Germanicae was prepared. They contend that the insect figured there is not Fabricius' species but *Mellinus campestris* (L.) which Richards [271]

[269] Faun. Insect. German., hft. 98, fig. 17, (1805–6).
[270] Ann. & Mag. Nat. Hist., (9), XI, p. 567, (1923).
[271] Trans. R. Ent. Soc. Lond., LXXXIII, p. 168, (1935).

has recently shown is a synonym of *Sphex mystacea* L., and that the proper name for *Mellinus campestris* Auctt. *nec* Linnaeus is *Gorytes Fargei* Shuckard, 1837. Thus if the arguments of authors were to be accepted, the correct name for *Mellinus* (*Arpactus*) *quadrifasciatus* Panzer, 1805 would be *Gorytes Fargei* Shuckard, 1837.[272] Moreover, since *G. Fargei* Shuckard is congeneric with *Sphex mystacea* L., the genotype of *Arpactus* Jurine, 1801, the name *Arpactus* might be retained for the group to which it has been recently applied. But Panzer in figuring *Mellinus* (*Arpactus*) *quadrifasciatus* F. states very definitely that the insect before him is Fabricius' species, while Fabricius conversely, in his original description in the Systema Piezatorum,[273] states that the insect he describes as *Mellinus quadrifasciatus* was sent to him by Panzer. Moreover, the description of *Mellinus* (*Arpactus*) *quadrifasciatus* given by Panzer in the Faunae Insectorum Germanicae is, so far as it goes, precisely the same as that of Fabricius. I do not feel consequently, that we may controvert Panzer's statement that he had *Mellinus quadrifasciatus* Fabricius before him.[274] What later authors, or even Panzer himself, may have decided he originally had and figured has nothing to do with the case. Panzer's original statement must be accepted at its face value. Inasmuch as *Mellinus quadrifasciatus* F., is congeneric with *Mellinus quinquecinctus* F., the genotype of *Gorytes* Latreille, 1803, *Arpactus* Panzer, 1805 falls as a synonym of that genus. Moreover, Panzer's use of the name in 1805 naturally precludes any subsequent use of the name *Arpactus*. This result may seem regretable to some, but in view of the varied and diverse application of the name *Arpactus*, I feel that it is a very desirable one since it will remove once and for all a name that has been a source of considerable trouble and tend to materially clarify the tangled nomenclatorial web in which this group has been too long entangled.

[272] An examination of material of *Mellinus campestris* Auctt. and *M. quadrifasciatus*, however, brings me to the inevitable conclusion that Panzer's figure will apply equally well to either species.

[273] Syst. Piezat., p. 298, (1805).

[274] This is in accordance with the expressions of opinions of many systematists given in Opinion 65, Internat. R. Zool. Nomencl., *q.v.*

From a taxonomic standpoint, the next name that may be applied to *Arpactus* Jurine, 1801 is *Argogorytes*,[275] proposed in 1899 by Ashmead for the New Zealand *Gorytes carbonarius* Smith. Material of this species before me agrees with *Gorytes mystaceus* (L.) in all essential respects except that the fore tarsi of the females possess a tarsal comb, and the first abdominal tergite is furnished with a transverse preapical furrow or impression. While these may seem trivial characters upon which to base a group, nevertheless for the time being I am retaining it as a subgenus discrete from its Palaearctic relatives which, however, are now without a name and for which I have proposed *Archarpactus* in lieu of *Arpactus* Jurine, 1801, with *Sphex mystacea* Linnaeus, 1761 as type. (See p. 4.)

ALYSSON Panzer, 1806 [276]

The first use of this name subsequent to the "Erlangen List" [262] was by Panzer [276] who in his Kritische Revision of 1806 characterized the genus and included in it three species: *Sphex bimaculata* Panzer, 1798, *Sphex fuscata* Panzer, 1798 [*nec* Fabricius, 1793?], and *Pompilus spinosus* Panzer, 1801. The first valid fixation of a type for *Alysson* Panzer, 1806 apparently must be accredited to Morice and Durrant [277] who in 1914 selected *Pompilus spinosus* Panzer, 1801 as type. *Alysson* Panzer, 1806 is thus isogenotypic with *Alyson* Jurine, 1807. The various designations of Curtis,[278] Westwood [279] and others may not be accepted for Panzer's name; they invariably apply to *Alyson* Jurine, 1807 which was monobasic.

NYSSON Latreille, [1796] [281]

Latreille originally proposed this genus as "*Nysso*" [280] without exponents in his Precis of 1796. Four species were associated with the name *Nysson* for the first time in the "Erlangen List." [262] In

[275] Canad. Entom., XXXI, p. 324, (1899).
[276] Krit. Rev. Insektenf. Deutschl., II, p. 169, (1806).
[277] Trans. Ent. Soc. Lond., 1914, p. 406, (1914).
[278] Brit. Ent., XIII, fol. 584, (1836).
[279] Intro. Mod. Class. Ins., II, Synops. Gen., p. 80, (1840).
[280] Prec. Char. Gen. Insect., p. 125, (1796).

the following year Latreille for the first time cited species [281] in connection with his genus and it is from these that the first valid selection of a type must be made. A full statement of this case will be found in Appendix II under the name *Nysson* Latreille [1796].

GONIUS Panzer, 1806 [282]

This name is merely a nomen nudum in the "Erlangen List." [262] The first valid proposal of the name must date from Panzer who in his Kritische Revision of 1806 [282] defined and included but one species in it, *Philanthus flavipes* Fabricius, 1793 [= *Crabro flavipes* F., 1781 = *Tiphia variegata* Fabricius, 1781 = *Gonius variegatus* (F.) = *Palarus variegatus* (F.)],[283] which thus becomes the type by monotypy. *Philanthus flavipes* F., 1793 [= *Crabro flavipes* F., 1781] must not be confused with *Tiphia flavipes* F., 1783 which, as Bradley [284] has shown, is the type of *Palarus* Latreille, 1802. *Gonius* Panzer, 1806 is congeneric, but not isogenotypic with *Palarus* Latreille, 1802.

MISCOPHUS Jurine, 1807 [285]

In the "Erlangen List" [262] this name was uncharacterized and contained no species. The first one to subsequently employ it was Jurine who in his Nouvelle Méthode [285] characterized the genus and included but one species in it, *Miscophus bicolor* Jurine, 1807, which thus becomes the type by monotypy.

DINETUS Panzer, 1806 [286]

Subsequent to the "Erlangen List" [262] the first valid use of this name was by Panzer who in his Kritische Revision of 1806 [286]

[281] Hist. Nat. Crust. Insect., III, p. 340, (1802).

[282] Krit. Rev. Insektenf. Deutschl., II, p. 176, (1806).

[283] This is the species which has usually hitherto been known as *Palarus flavipes* (F.), but as Turner (1909, Ann. & Mag. Nat. Hist., (8), III, p. 484) has shown, the correct name is *Palarus variegatus* (F.).

[284] Trans. Ent. Soc. Lond., 1919, p. 65, (1919).

[285] Nouv. Méthod. class. Hymén., p. 206, (1807).

[286] Krit. Rev. Insektenf. Deutschl., II, p. 192, (1806).

characterized the genus and placed two species in it: *Pompilus pictus* [= *Crabro pictus* Panzer, 1794 = *Crabro pictus* Fabricius, 1793] and *Pompilus guttatus* [= *Crabro pictus* Panzer, 1799, ♀ = *Sphex guttata* Fabricius, 1793], the same two [287] which were cited in connection with the genus in the "Erlangen List." In 1810 Latreille [287] designated *Dinetus pictus* Jur[ine, 1807] [= *Crabro pictus* Fabricius, 1793] type of the genus.

CEMONUS Panzer, 1806 [288]

The nomenclature of this subgenus of *Pemphredon* is in a fantastic tangle. The name *Cemonus* appears for the first time in Jurine and Panzer's "Erlangen List" [262] coupled with one species, [*Sphex*] *Crabro unicolor* Panzer, 1797, but inasmuch as the International Commission on Zoological Nomenclature now proposes to suppress the "Erlangen List," this reference becomes of no further interest from a nomenclatorial standpoint. Panzer was the first to subsequently use the name. In his Kritische Revision [288] he gave a formal characterization of the genus and cited as sole example *Sphex* [*Crabro*] *unicolor* Panzer [1797 *nec* Fabricius, 1787 = *Cemonus rugifer* Dahlbom, 1844], which thus becomes the type by monotypy. Panzer, as have practically all later authors presumably upon his authority, regarded his *Sphex* [*Crabro*] *unicolor* the same as *Crabro lugubris* Fabricius, 1793. Were this synonymy correct, then *Cemonus* Panzer, 1806 would be an absolute synonym of *Pemphredon* Latreille, 1796, since they both in effect would have the same species as type. Bluthgen,[289] however, has recently demonstrated that *Sphex* [*Crabro*] *unicolor* Panzer, 1797 is quite different from *Crabro lugubris* Fabricius, 1793, and although he has not apparently realized that Panzer's name is a homonym, has indicated that *Cemonus rugifer* Dahlbom, 1844, of which he had seen the type, is indubitably conspecific with *Sphex* [*Crabro*] *unicolor* Panzer, 1797 *nec* Fabricius, 1787. Dahlbom's name, therefore, must be used in the future for Panzer's species.

[287] *Cf.* footnotes 65 and 66 under *Dinetus* Panzer, 1806 in the catalogue.
[288] Krit. Rev. Insektenf. Deutschl., II, p. 186, (1806).
[289] Konowia, X, pp. 121–129, (1931).

The following year, Jurine likewise characterized *Cemonus*,[290] dividing it into two groups, or families as he called them. In the first family, which Jurine defined by the first and second submarginal cells of the fore wing each receiving a recurrent vein, he placed *Crabro lugubris* Fabricius, 1793 and *Crabro minutus* Fabricius, 1793, while in the second family, which he distinguished from the first by the fact that both recurrent veins were received by the first submarginal cell, he put but one species, a "*Sphex unicolor*," which he states is the *Pelopoeus unicolor* of Fabricius,[291] and calls attention to that author's blunder in citing *Sphex* [*Crabro*] *unicolor* Panzer, 1798 under the synonymy of both *Pelopoeus unicolor* on page 204 and *Pemphredon lugubris* on page 315 of the Systema Piezatorum.[292] Inasmuch as all later authors practically without exception have regarded this second family of Jurine as a group distinct and discrete from his first family, it becomes imperative to find out what *Sphex unicolor* Jurine, 1807 was in order to interpret correctly the later synonymical history of the group. Two courses are open. We may assume either that Jurine described a new species—*Sphex unicolor* Jurine 1807, *nec Sphex* (*Crabro*) *unicolor* Panzer, 1797, *nec* Fabricius, 1787, or that Jurine's "*Sphex unicolor*" is referable back to *Pelopoeus unicolor* Fabricius, 1805. In support of the first assumption is Jurine's statement that he has an individual female before him and from which he has drawn his description—such as it is. In 1882 Kohl [293] examined the Jurinean collection in the Geneva museum and records in his notes only a *Cemonus unicolor*, stating this is the species which Jurine calls *C. unicolor* on the plate and *C. lugubris* of the first family in his text. Kohl, therefore, merely corroborates Jurine on this point; he fails, however, to make any mention of *Sphex unicolor* Jurine but inasmuch as he adds that Jurine's collection has suffered from the attacks of Anthrenus it may be not too much to assume that Jurine's specimen of this is no longer in existence. There remains then only Jurine's statement that he proposes to use Fabricius'

[290] Nouv. Méthod. class. Hymén., p. 213, (1807).
[291] Syst. Piezat., p. 204, (1805).
[292] Nouv. Méthod. class. Hymén., p. 214, footnote, (1807).
[293] Mitth. Schweiz. Ent. Ges., VI, p. 395, (1882).

name for the specimen before him and that it resembles *Pemphredon lugubris* (F.) very closely, in fact, save for the difference in venation it is difficult to separate the two. Thus *Sphex unicolor* Jurine, 1807 must be regarded the same as *Pelopoeus unicolor* Fabricius, 1805, and the fate of Jurine's second family is dependent upon the identity of Fabricius' species.

In assuming that Jurine did not describe a new species but that his "*Sphex unicolor*" is referable back to *Pelopoeus unicolor* F., 1805, a peculiar situation confronts us. In the synonymy under this species Fabricius gives first *Sphex atra* Fabricius [,1798 and 1793], which is the genotype of *Psen* Latreille, 1796, and then *Sphex unicolor* Panzer [,1797]. Inasmuch as Fabricius likewise lists *Sphex atra* under *Pelopoeus compressicornis*, the species immediately following *P. unicolor*, and since there is no question but what *Sphex atra* is a *Psen*, this reference may be disregarded [294] and attention centered upon "*Sphex unicolor* Panzer." Since Fabricius appends the statement "*ad nostra minor*" to his reference to Panzer's species, the problem is then, has Fabricius here described a new species? His form, however, is not essentially that of a new description; the only basis for so interpreting it is his remark "*ad nostra minor*," which is rather flimsy and dubious evidence for supporting such a thesis. Jurine in 1807 remarked upon the fog which encompassed Fabricius and caused him to cite Panzer's species under the synonymy of both *Pelopoeus unicolor* on page 204 and *Pemphredon lugubris* on page 315. Under the former, however, Fabricius gives full bibliographic data, whereas under the latter his citation is incomplete. Consequently, despite the fact that authors seem to have regarded *Pelopoeus unicolor* Fabricius, 1805 as a new species, it must be referred back to *Sphex* (*Crabro*) *unicolor* Panzer, 1797 *nec* Fabricius, 1787. Thus Jurine's second family is identical with *Cemonus* Panzer, 1806.

[294] Fabricius appended a full bibliographic reference to *Sphex atra* as cited in the synonymy of *Pelopoeus compressicornis*, whereas to the *Sphex atra* given under *Pelopoeus unicolor*, his citation is incomplete.

In 1837 Shuckard,[295] after some discussion of the situation, employed the name *Pemphredon* [297] for the group represented by *Crabro lugubris* Fabricius, 1793 and restricted *Cemonus* to Jurine's second family, designating as type of it "*Cemonus unicolor* F.," [296] *i.e. Pelopoeus unicolor* F., 1805, which as indicated above is presumably the same as *Sphex* (*Crabro*) *unicolor* Panzer, 1797. *Cemonus* Jurine, 1807, therefore is isogenotypic with *Cemonus* Panzer, 1806.

In 1837, for those species of *Pemphredon* in which the first submarginal cell of the fore wing receives both the recurrent veins, Westwood proposed as a subgenus the name *Dineurus*,[298] selecting as type "*P*[*emphredon*] *unicolor* Lat[reille, 1809]," which Latreille states is the second family of *Cemonus* Jurine, 1807, *i.e. Sphex unicolor* Jurine, 1807.[299] As shown above, this species ultimately traces back to *Sphex* (*Crabro*) *unicolor* Panzer, 1797 *nec* Fabricius, 1787 [= *Cemonus rugifer* Dahlbom, 1844], the genotype of *Cemonus* Panzer, 1806 and thus renders *Dineurus* Westwood, 1837 an absolute synonym of that genus. In 1840, Westwood apparently realizing that something was rotten in the state of Denmark, proposed the name *Diphlebus* [300] for the group which in 1837 he had called *Dineurus*, stating, however, that the type in this instance

[295] Essay Indig. Foss. Hymen., p. 199 (Jan., 1837). Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 160), on the authority of Mr. F. J. Griffin, states that Shuckard's "Essay" was out by the second of January, 1837. This consequently antedates, and fortunately renders ineffectual, Westwood's attempt (April, 1837, Mag. Nat. Hist. (N. S.), I, p. 173) to restrict *Cemonus* Jurine, 1807 to Jurine's first family by selecting *Crabro lugubris* Fabricius, 1793 as type of *Cemonus* Jurine, 1807.

[296] Shuckard was wrong in assuming that Jurine's figure of *Cemonus unicolor* (Nouv. Méthod., pl. 11, gen. 28) was meant for *Sphex unicolor* Jurine, 1807 (Nouv. Méthod., p. 214, footnote). An examination of Jurine's text immediately belies this contention. His plates had been prepared long before his text was printed and in the interim Jurine had decided, probably on the authority of Panzer, that the correct name for the insect he had figured as *Cemonus unicolor* was *Cemonus lugubris*.

[297] Essay Indig. Foss. Hymen., pp. 193–195, (1837).

[298] Mag. Nat. Hist. (N. S.), I, p. 173 (April, 1837). For an interesting series of philippics and counter-philippics on this subject, see: Mag. Nat. Hist., IX, pp. 564–565 (Nov., 1836); Mag. Nat. Hist. (N. S.), I, pp. 170–173 (April, 1837); *idem*, pp. 248–257 (May, 1837); *idem*, pp. 316–318 (June, 1837); and Shuckard, Essay Indig. Foss. Hymen., pp. 194–195 (Jan., 1837).

[299] Gen. Crust. Insect., IV, p. 84, (1809).

[300] Introd. Mod. Class. Insects, II, Gen. Synops., p. 81, (1840).

was "*Pelop*[*oeus*] *unicolor* Fabr[icius, 1805]. Nec Jurine [,1807]." *Diphlebus*, nevertheless, suffers the same fate as *Dineurus* Westwood, 1837 and *Cemonus* Jurine, 1807. Still later, in 1883 Kohl proposed for this group the name *Chevrieria*,[301] with *Pelopoeus unicolor* Fabricius, 1805 as type, and which aside from the fact that it is a homonym of Heer's 1839 Staphylinid name, likewise follows Jurine's and Westwood's names into merciful oblivion.

Thus *Cemonus* Panzer, 1806, *Cemonus* Jurine, 1807, *Dineurus* Westwood, 1837, *Diphlebus* Westwood, 1840, and *Chevrieria* Kohl, 1883 all have a common type, *Sphex* (*Crabro*) *unicolor* Panzer, 1797 *nec* Fabricius, 1787 [= *Cemonus rugifer* Dahlbom, 1844], and as the correct name for that subgenus of *Pemphredon* in which the first submarginal cell of the fore wing receives both recurrent veins, it is necessary to revert once more to the name *Cemonus* which, however, must be accredited to Panzer rather than to Jurine. Had *Crabro lugubris* Fabricius, 1793 and *Sphex* (*Crabro*) *unicolor* Panzer, 1797 proved to be conspecific as Panzer, Jurine, Latreille and practically all later authors had supposed, all these names would have been absolute synonyms of *Pemphredon* Latreille, 1796 and it would have been necessary to propose a new name for the group defined here as *Cemonus* Panzer, 1806. Fortunately this has not proved necessary.

OXYBELUS Latreille, 1796 [302]

Latreille originally proposed this genus in his Precis of 1796 [302] without citing any exponents. In the "Erlangen List" [303] three species were associated with the name for the first time: *Crabro lineatus* F[abricius, 1793 = *Nomada lineata*, F., 1787],[304] *Crabro uniglumis* [Fabricius, 1775 = *Vespa uniglumis* Linnaeus, 1758], and *Crabro biglumis* [Fabricius, 1775 = *Vespa biglumis* Linnaeus,

[301] Mitth. Schweiz. Ent. Ges., VI, p. 658, (1883).

[302] Prec. Char. Gen. Insect., p. 129, (1796).

[303] Erlang. Litt. Ztg., I, p. 164, (1801).

[304] Shuckard (1837, Essay Foss. Hymen., p. 106) and Bingham (1897, Faun. Brit. Ind., Hymen., I, p. 314) designated this species as type of *Oxybelus*, but inasmuch as this was not a species given by Latreille as an example of the genus in 1802, these designations are not acceptible.

1758].[305] The following year,[306] Latreille made the first subsequent mention of the genus and gave as its sole example, *Crabro uniglumis* F[abricius, 1775 = *Vespa uniglumis* Linnaeus, 1758 = *Oxybelus uniglume* (L.)],[307] which thus becomes the type by monotypy. Latreille in 1810 [308] likewise selected this species as type.

Appendix II

The Tables des Genres which is appended to Latreille's Considérations Générales of 1810 contains the names of twenty-nine genera of Sphecoid wasps. Opinion 11 of the International Commission on Zoological Nomenclature directs that the species cited under each genus in this list should be accepted as the genotype of the respective genus, provided of course that the species thus cited was originally included in the genus and that there are no previous valid designations. A study of the Table reveals the fact that the citations are divisible into at least two major categories. On the one hand are those cases in which Latreille cited but one species in connection with a generic name and which may be unequivocally accepted as designations of the types of the respective genera. On the other hand, there are quite a few instances in which more than one species was cited in connection with the genus and the correct interpretation of these cases has been a moot point with taxonomists for a number of years. However, a careful study of the Table indicates that this latter category is clearly divisible into two groups: first, those genera under which Latreille cites first one species which he presumably regarded as the type, following which is the word *ejus*[*dem*] frequently preceded by a semicolon and a dash and then one or more species which I feel must be regarded in the nature of a footnote or afterthought; secondly, those genera under which two or more species are given, but without the interpolation of the word *ejusdem* between the first and the remaining ones. In the first of the above mentioned categories where two or more species were cited under a genus, I

[305] *Vespa biglumis* L., 1758 is more or less of a mystery; some authors regard it as a species of *Polistes*.

[306] Hist. Nat. Crust. Insect., III, p. 343, (1802).

[307] The gender of *Oxybelus* is neuter, not masculine as hitherto believed.

[308] Consid. Gen., Tabl., p. 438, (1810).

am thoroughly convinced that the first species given was intended to be the type and should be so regarded. In the second instance, Latreille's mode of citation is somewhat ambiguous and I believe that it would be well to disregard those that fall in this group.

At the recent Zoological Congress held in Lisbon in September, 1935, the International Commission on Zoological Nomenclature rendered a supplementary opinion to Opinion 11 to the effect that Latreille in the Table appended to his Considérations Générales may be considered to have designated the types of only those genera under which he cites but one species. As I have indicated above, I am not fully in agreement with this inasmuch as it would rule out a number of individual cases in which Latreille's intent in the choice of a type is quite clear and as indicated below will necessitate accepting as type a species other than that which has been customarily so regarded.

Of the twenty-nine generic names of Sphecoids which Latreille lists in his Table, the following seventeen may be regarded without question as having had their genotypes correctly designated: *Ammophila* Kirby, 1798, * *Pronoeus* Latreille, 1809, * *Chlorion* Latreille, 1802, * *Dolichurus* Latreille, 1809, *Podium* Fabricius, 1805, *Pelopoeus* Latreille, 1802, *Bembex* Fabricius, 1777, *Monedula* Latreille, 1802, * *Astata* Latreille, 1796, *Larra* Fabricius, 1793, *Dinetus* Panzer, 1806, * *Miscophus* Jurine, 1807, * *Pison* Jurine, 1808, * *Nitela* Latreille, 1809, * *Oxybelus* Latreille, 1796, *Crabro* Fabricius, 1775, *Cerceris* Latreille, 1802. The eight names marked with an * are monobasic and so actually had their types fixed previously. The remaining twelve fall into one of two categories: either a species not originally included was given as type, or more than one species was cited in connection with the generic name. These are discussed below in the order in which they appear in the Table on page 438 of Latreille's Considérations Générales.

SPHEX Linnaeus, 1758

As type of the Linnaean genus *Sphex*, Latreille in 1810 proposed *Sphex flavipennis* Fabricius, 1793, a species not described until five years after Linnaeus' death. Nevertheless, in spite of this, the name *Sphex* was used almost uniformly in the sense of Latreille for

nearly a hundred years until Fernald [308a] in 1905 called attention to this error, discussed it at some length, designated *Sphex sabulosa* Linnaeus, 1758 as type of *Sphex* Linnaeus, 1758, a decision with which the International Commission on Zoological Nomenclature concurred in rendering Opinion 32, and proposed *Proterosphex* in lieu of *Sphex* Auctt. *nec* Linnaeus, 1758. *Sphex* Linnaeus, 1758 thereby became isogenotypic with *Ammophila* Kirby, 1798 which fell as an absolute synonym and *Chlorion* Latreille, 1802, as the next oldest name in the group, was resurrected to be used for *Sphex* Auctt. *nec* Linnaeus. Recently the Commission while still of the opinion that *Sphex sabulosa* Linnaeus is the type of *Sphex* Linnaeus, 1758, but likewise, as a result of representations brought before them, presumably convinced that strict application of the rules in this case might apparently cause greater confusion than uniformity, propose to suspend the rules [309] and recognize as valid Latreille's designation of *Sphex flavipennis* Fabricius, 1793 as the type of *Sphex* Linnaeus, 1758. If this course is followed, the name *Sphex* reverts to the group for which Fernald in 1905 proposed the name *Proterosphex* and which has laterly been known as *Ammobia* Billberg, 1820. *Ammophila* Kirby, 1798 is then resurrected for *Sphex* in the sense of Linnaeus and Fernald. However, as an immediate corollary of this proposed action, *Sphex*, as the Commission now advocates that it should be used, must be accredited to Latreille, presumably 1810, for only by the most specious sophistry may the name still continue to be attributed to Linnaeus. Moreover, *Sphex* Latreille *nec* Linnaeus, 1758 is a homonym, no matter how the case is reviewed, and as such, is invalid. Its validity is entirely dependent upon the dubious authority of a commission whose personnel must inevitably change from time to time. There is no guarantee that future commissions will not abrogate the proposed decision as readily as the present body now proposes in effect to annul that of its predecessor. It is needless to point out further the absurdity of following the procedure which the Commission now proposes to advocate, that by this action they tend to vitiate such powers as they have, that in effect they nullify all preceding opinions and tend to destroy the foundations upon which

[308a] Ent. News, XVI, pp. 163–166, (1905).
[309] Science, LXXXIII, p. 552, (1936).

the Zoological Code is founded. Their abject capitulation to the plea of temporal expediency in this instance is most certainly ill advised. Four or five decades ago the vertebrate zoologist underwent the same nomenclatorial travail that the entomologist is now undergoing. The mammalogist, the ornithologist, and the remaining vertebrate confraternity have apparently survived this period of labour. The entomologist, however, is fast approaching that condition which will soon permit him to be classed as one of those animals which are his chief concern.

Although I realize that I shall be subject to harsh criticism from certain quarters for contending that *Sphex sabulosa* Linnaeus, 1758 must be regarded as the type of *Sphex* Linnaeus, 1758, I believe that it is the only intelligent course that may be pursued under the circumstances.

Recently Liebermann [309a] has attempted to prove that the type of *Sphex* Linnaeus, 1758 is *Sphex fossoria* Linnaeus, 1758 by tautonymy, basing his contention upon the fact that the name *fossoria* expresses the typical biological characteristic of the group and thus is virtually equivalent to "type by original designation" as expressed in Article 30, I, *b*, of the International Rules of Zoological Nomenclature. Although his argument is interesting, in fact even ingenious, it is nevertheless based upon a series of quite erroneous assumptions. Indeed, were *fossoria* to be regarded as type of *Sphex*, then this name would perforce need to be transferred to the Crabronines where it would pre-empt *Ectemnius* Dahlbom (olim *Solenius* Auctt.), a fact which Liebermann gives no evidence of having realized.

STIZUS Latreille, 1802

Latreille originally included two species—*Bembex tridentata* Fabricius, 1793 and *Bembex ruficornis* Fabricius, 1787—in *Stizus*. In 1810 under this name he cites two species as follows: *Larra ruficornis* Fab.; ejus. *crabro tridens*. If we were to accept the proposed ruling of the Commission it would be impossible to regard this as a valid type fixation but must find another one that will be in accordance with the code. In the half century or more

[309a] An. Soc. Cient. Argentina, CXII, pp. 6–9, (1931).

that followed the appearance of Latreille's Considérations Générales there was considerable controversy over the true identity of *Stizus* Latreille and *Larra* Fabricius, the two names at times being almost inextricably entangled. It will scarcely serve our purpose, however, to recapitulate these arguments here. Suffice it to say that apparently the next designation that may be regarded as valid is that of Patton [310] who in 1879 selected *Bembex tridentata* Fabricius as type. From a taxonomic standpoint this will cause the name *Stizus* to be transferred to that group to which Parker [311] in 1929 applied Guérin's name *Stizoides* [311] which then falls as a synonym of *Stizus*. For the group which Parker defines as *Stizus* it will then be necessary to employ *Megastizus* Patton, 1879. However, as I have indicated in the introduction to this appendix, I am of the opinion that in those cases in which Latreille gave more than one species in connection with the generic name, separating the first from those that followed by the word *ejusdem*, we should accept the first mentioned species as type of the respective genus.

GORYTES Latreille, 1803

In 1810 Latreille gives *Mellinus mystaceus* Fabricius [= *Sphex mystacea* Linnaeus, 1761] as type of *Gorytes*. This genus, however, was originally proposed with but one species included—*Mellinus quinquecinctus* Fabricius, 1793—which thus becomes the type by monotypy. *Mellinus mystaceus* (F.) is the type of *Arpactus* Jurine, 1801 and *Archarpactus* Pate. Inasmuch as this case has been quite fully discussed by Morice and Durrant in 1914,[312] Bradley in 1919,[313] and Pate in 1935,[314] nothing further need be said here.

NYSSON Latreille, [1796]

Latreille originally proposed this genus in his Precis without exponents, and it was not until 1802, when he gave *Sphex maculata* F[abricius, 1787] and *Crabro spinosus* F[abricius, 1775 = *Sphex spinosa* Forster, 1771] as examples, that any species were asso-

[310] Bull. U. S. Geol. Surv., v, p. 346, (1879).
[311] Proc. U. S. Nat. Mus., LXXV, art. 5, p. 10, (1929).
[312] Trans. Ent. Soc. Lond., 1914, pp. 403–406, (1914).
[313] Trans. Ent. Soc. Lond., 1919, pp. 62–64, (1919).
[314] Ent. News, XLVI, p. 248, (1935).

ciated with the name.[315] In 1810, Latreille selected *Mellinus tricinctus* Fabricius, 1805 as type of *Nysson*. Although it is now generally recognized that this species is a synonym of *Crabro spinosus* Fabricius, 1775 [= *Sphex spinosa* Forster, 1771], there is apparently no evidence that Latreille was aware of this. In fact, in 1809,[316] he apparently considered *M. tricinctus* a synonym or variety of *Mellinus interruptus* Panzer, 1799 which while likewise now considered to be a synonym of *Sphex spinosa* Forster 1771, nevertheless, was then believed by Latreille to be a discrete species. Consequently, inasmuch as neither *Mellinus interruptus* Panzer, 1799 nor *M. tricinctus* Fabricius, 1804 were originally cited as exponents of *Nysson* by Latreille in 1802 I scarcely feel that we may consider that in 1810 he selected a type in strict conformance with the provisions of the code. Apparently Shuckard [317] in 1837 was the first one to make a valid designation for this genus when he selected *Nysson spinosus* F. [= *Crabro spinosus* Fabricius, 1775 = *Sphex spinosa* Forster, 1771 = *Nysson spinosus* (Forster)] as type of *Nysson* Latreille.

PSEN Latreille, 1796 [318]

Under the name *Psen*, Latreille cites two species as follows: *Trypoxylon atratum* F.: ejusd. *equestre*. Since, however, but one species—*Sphex atra* Fabricius, 1794—was first associated with the name *Psen* by Latreille in 1802,[319] this species automatically becomes the type by monotypy and Latreille's designation in 1810 of *Trypoxylon atratum* Fabricius, 1805 [= ? *Sphex pallipes* Panzer, 1798] as the type of *Psen* is invalid and may be disregarded. *Trypoxylon atratum* Fabricius, 1805 is the type of *Diodontus* Curtis, 1834.

[315] In Jurine and Panzer's "Erlangen List" of 1801, the following four species were given as exponents of *Nysson: Crabro spinosus* F[abricius, 1775 = *Sphex spinosa* Forster, 1771], *Crabro trimaculata* Rossi, 1790, *Mellinus interruptus* F[abricius, 1798], and *Pompilus maculatus* F[abricius, 1798 = *Sphex maculata* Fabricius, 1787]. However, inasmuch as the International Commission on Zoological Nomenclature at the recent congress held in Lisbon voted to suppress the "Erlangen List" this citation does not concern us here.

[316] Gen. Crust. Insect., IV, p. 91, (1809).

[317] Essay Indig. Foss. Hymen., p. 99, (1837).

[318] *Vide et.* discussion of this name in Appendix I.

[319] Hist. Nat. Crust. Insect., III, p. 338, (1802).

PALARUS Latreille, 1802

Latreille in 1810 selected *Philanthus flavipes* Fabricius, 1790 [= *Crabro flavipes* F., 1781 = *Tiphia variegata* F., 1781 = *Palarus variegatus* (F.)] [320] as type of *Palarus*, but as indicated in Appendix I this species is the type of *Gonius* Panzer, 1806. *Palarus* Latreille, 1802 is monobasic, having been erected for the reception of *Tiphia flavipes* Fabricius, 1793 [= *Palarus rufipes* Latreille, 1811] which, as Bradley [321] has indicated, is its true type.

LYROPS Illiger, 1807 [322]

This genus was first proposed by Illiger in 1807 with but one species included, *Andrena etrusca* Rossi, 1790, which thus automatically becomes the type. Consequently Latreille's designation in 1810 of *Larra tricolor* Fabricius, 1805 [= *Sphex tricolor* Fabricius, 1793 *nec* Schrank, 1781 = *Tachytes tingitanus* new name] is incorrect. Richards has recently fallen into the same error,[323] despite the fact that Latreille in 1809 [324] acknowledges Illiger as the original describer of this genus.

STIGMUS Panzer, 1804 [325]

Panzer when he erected this genus in 1804 [325] included but one species in it, *Stigmus pendulus* Panzer, 1804, which thus automatically becomes the type by monotypy. The designation of Latreille in 1810 of *Pemphredon minutum* (Fabricius) [= *Crabro minutus* F., 1793 = *Xylocelia minuta* (F.)] is thus incorrect and may be disregarded.

MELLINUS Fabricius, 1790

In 1810 Latreille cited two species under *Mellinus: Mellinus ruficornis* F[abricius, 1793] and *Mellinus pratensis* Jurine [,1807]. Although it is now generally recognized that the first of these is a

[320] This is the species which has usually hitherto been known as *Palarus flavipes* (F.), but as Turner (1909, Ann. & Mag. Nat. Hist., (8), III, p. 484) has shown, the correct name is *Palarus variegatus* (F.).

[321] Trans. Ent. Soc. Lond., 1919, p. 65, (1919).

[322] Fauna Etrusca, II, p. 162, (1807).

[323] Trans. R. Ent. Soc. Lond., LXXXIII, p. 164, (1935).

[324] Gen. Crust. Insect., IV, p. 71, (1809).

[325] Faun. Insect. German., hft. 86, no. 7, (1804).

synonym of *Mellinus sabulosus* (F.) [= *Crabro sabulosa* Fabricius, 1787], and the second of *M. arvensis* (L.) [= *Vespa arvensis* Linnaeus, 1758], both of which were species originally included in *Mellinus*, nevertheless, Latreille's previous works do not indicate that he realized this. Moreover, since he cites the two species with merely a dash between them, this citation falls into the ambiguous category which it is best to entirely disregard. Apparently the first valid designation was that of Curtis [326] who in 1836 selected *Vespa arvensis* Linnaeus, 1758 [= *Mellinus arvensis* (L.)] as type of *Mellinus* Fabricius, 1790. Richards has recently shown that *Vespa arvensis* L., 1758 is merely the opposite sex of *Sphex vaga* L., 1758.[327]

ALYSON Jurine, 1807 [328]

Under this name Latreille in 1810 gives two species as follows: *Pompilus lunicornis* Fabr[icius, 1798]. ejusd.—*P*[*ompilus*] *fuscatus* [= *Sphex fuscatus* Panzer, 1798 = *Sphex fuscata* Fabricius, 1793 = *Sphex rufipes* Linnaeus, 1758 = *Pompilus rufipes* (L.)]. However, inasmuch as Jurine originally included but one species, *Pompilus spinosus* Panzer, 1801, in *Alyson*,[328] the genus is monobasic and we may disregard Latreille's later attempt to select a type. *Alyson* Jurine, 1807 is isogenotypic with *Alysson* Panzer, 1806.

PHILANTHUS Fabricius, 1790

Under *Philanthus*, Latreille in 1810 cites two species as follows: *Philanthus pictus* Fabr[icius, 1805 = *Philanthus pictus* Panzer, 1797].—ejusdem *P. coronatus* [Fabricius, 1790]. Inasmuch as Latreille here separates the two species by the word *ejusdem* it would be possible to accept the first of these as the type were it not for the fact that *Philanthus pictus* [Fabricius] was not a species originally included in the genus. Since it is now generally conceded that *Philanthus pictus* Fabricius, 1805 [= *P. pictus* Panzer, 1797] is a synonym of *Philanthus triangulum* Fabricius, 1790 [= *Vespa triangulum* F., 1787] it still might be possible to accept this as a valid designation had Latreille but given evidence he was

[326] Brit. Ent., XIII, p. 580, (1836).
[327] Trans. R. Ent. Soc. Lond., LXXXIII, p. 169, (1935).
[328] 1807, Nouv. Method., p. 196, (1807).

aware of this fact. Unfortunately, however, his previous publications will not support this thesis. The next designation of a type for the genus was that of Curtis [329] who in 1829 selected *Crabro androgynus* Rossi, 1792. Although this species was not one originally included in *Philanthus*, nevertheless, it is now generally agreed to be a synonym of *Philanthus triangulum* (F.), and Bradley [330] has accepted it as a valid designation. However, Curtis gives no sign in this or in any of his earlier publications that he was aware Rossi's species was the same as Fabricius'; consequently I do not feel that we may consider his designation valid. Apparently the first valid fixation was made by Shuckard [331] who in 1837 selected *Philanthus coronatus* Fabricius, 1790 as type of *Philanthus* Fabricius.

PEMPHREDON Latreille, 1796 [332]

Latreille established the genus *Pemphredon* in his Precis of 1796 without citing any exponents. In 1802,[333] he gave two species, *Crabro lugubris* Fabricius, 1793 and *Crabro leucostoma* [= *Sphex leucostoma* Linnaeus, 1758], as examples and it is from these that the genotype must be chosen. Panzer in 1806 [334] characterized Jurine's genus *Cemonus* and included in it but one species, *Sphex unicolor* Panzer, 1797 *nec* Fabricius, 1787 [= *Cemonus rugifer* Dahlbom, 1844] which he stated was the same as *Pemphredon lugubris* Fabricius, 1805 [= *Crabro lugubris* F., 1793]. In *Pemphredon*, Panzer placed *Crabro leucostoma* along with two other species. It might be contended therefore that Panzer fixed the type of *Pemphredon* Latreille as *Crabro leucostoma* [= *Sphex leucostoma* Linnaeus, 1758] by the elimination method.[335] However, Bluthgen [336] has recently shown that Panzer and later authors were mistaken in considering *Sphex unicolor* Panzer, 1797 *nec* Fabricius, 1787 conspecific with *Crabro lugubris* Fabricius, 1793, consequently it may not be maintained that Panzer fixed the type

[329] Brit. Ent., VI, p. 273, (1829).
[330] Trans. Ent. Soc. Lond., 1919, p. 61, (1919).
[331] Essay Indig. Foss. Hymen., p. 246, (1837).
[332] *V. et.* discussion of *Cemonus* Panzer, 1806 in Appendix I.
[333] Hist. Nat. Crust. Insect., III, p. 342, (1802).
[334] Krit. Rev. Insektenf. Deutschl., II, p. 186, (1806).
[335] *Vide* Opinion 6, Internat. R. Zool. Nomencl.
[336] Konowia, X, pp. 121–129, (1931).

of *Pemphredon* in 1806. This is indeed fortunate, for otherwise it would be necessary to transfer the name *Pemphredon* from the group with which it has been associated for so long to the Crabronines where it would pre-empt *Crossocerus* Lepeletier & Brullè, 1835.

As type of *Pemphredon*, Latreille in 1810 gave *Cemonus unicolor* Jurine, 1807 [= *Cemonus lugubris* Jurine, 1807]. Although this was not one of the two species which Latreille had first placed in *Pemphredon*, in 1809 [337] he had listed it as a synonym of *Pemphredon lugubris* (F.) on the authority of Jurine,[338] and in citing this species as type in the manner in which he did, no doubt had in mind Jurine's excellent figure in the Nouvelle Méthode. Moreover, Kohl [339] who in 1882 examined the Jurinean collection in the Geneva museum stated that *Cemonus unicolor* Jurine, 1807 [Nouv. Méthod., pl. 11, gen. 28] is indubitably *Pemphredon lugubris* (F.) [= *Crabro lugubris* Fabricius, 1793]. Consequently, although Latreille's intent in the choice of a type is perfectly clear, nevertheless inasmuch as he based his selection of a type upon a false premise, it might be contended that his designation is invalid and it may be well therefore to adopt as the first valid fixation that of Shuckard [340] who in January of 1837 selected *Pemphredon lugubris* (F.) [= *Crabro lugubris* Fabricius, 1793] as type of *Pemphredon* Latreille, 1796. This consequently antedates by but a few weeks the designation of Curtis [341] who in February of the same year likewise designated *Pemphredon lugubris* (F.) as type of this genus. Westwood, however, in a series of polemics [342] directed at Shuck-

[337] Gen. Crust. Insect., IV, p. 84, (1809).

[338] Jurine (1807, Nouv. Méthod., p. 214) states that the insect he figured as *Cemonus unicolor* [Panzer] on plate 11, Genus 28 is *Cemonus lugubris* (F.) [= *Crabro lugubris* Fabricius, 1793].

[339] Mitth. Schweiz. Ent. Ges., VI, p. 395, (1882).

[340] Essay Indig. Foss. Hymen., p. 193, (1837). Richards (1935, Trans. R. Ent. Soc. Lond., LXXXIII, p. 160) states ". . . Mr. F. J. Griffin tells me that Shuckard's 'Essay on . . . Fossorial Hymenoptera' was out by 2 Jan. 1837. . . ."

[341] Brit. Ent., XIV, p. 632, (February 1, 1837). Although Sherborn (1911, Ent. Monthly Mag., XLVII, pp. 84–85) contends that the dates Curtis gave on his plates are correct, nevertheless in view of Shuckard's remarks on page 194 of his "Essay," I cannot help but feel that folio 632 of Curtis' British Entomology appeared prior to Shuckard's "Essay."

[342] Loudon's Mag. Nat. Hist., IX, p. 565, (1836); Mag. Nat. Hist., (N. S.), I, pp. 169–173; 316–320, (1837).

ard [343] contended that *Pemphredon minutus* (F.) [= *Crabro minutus* Fabricius, 1793 = *Xylocelia minuta* (F.)] was the true type of *Pemphredon* and that *Crabro lugubris* Fabricius, 1793 was the type of *Cemonus* Jurine, 1807 but inasmuch as *Pemphredon minutus* (F.), which is a *Xylocelia* [olim *Diodontus* Auctt., *nec* Curtis, 1834], was not one of the two species Latreille gave as exponents of *Pemphredon* in 1802, Westwood's designation must be disregarded.

Appendix III

In a recent paper, Dr. O. W. Richards [344] has made a valuable contribution to the stabilization of the nomenclature of the Aculeate Hymenoptera and has, as a result, placed workers in this group deeply in his debt. It is not my purpose here to criticize capriciously any part of it. However, I find myself unable to agree with certain statements he has made and certain conclusions to which he has come, and I consequently take this opportunity to call attention to our divergent points of view.

Richards was apparently unaware of the important series of papers published by Patton [345] in 1880, and as a result incorrectly attributed the fixation of the genotypes of a number of genera, *viz.*: *Larrada* Smith, 1856, *Lyrops* Latreille, 1809 ([sic!] *i.e.* Illiger, 1807), *Liris* Fabricius, 1805, *Lyroda* Say, 1837 and *Morphota* Smith, 1856.[346] A discussion of these will be found in the catalogue in footnotes under the respective genera.

I find myself unable at present to agree with Richards that the correct name to use for the cosmopolitan group hitherto known as *Notogonia* Costa, and laterly *Notogonidea* Rohwer, is *Leptolarra* Cameron, and give herewith the synonymy of the group as I understand it, together with a short discussion of the case.

[343] Mag. Nat. Hist., (N. S.), I, pp. 248–257, (1837).

[344] Notes on the nomenclature of the Aculeate Hymenoptera, with special reference to the British genera and species. Trans. R. Ent. Soc. London, LXXXIII, pp. 143–176, (1935).

[345] Proc. Boston Soc. Nat. Hist., XX, pp. 378–385; 385–397, (1880).

[346] Patton does not actually fix any genotype for all of these names. Richards' statements, however, are incorrect; see discussion in the footnotes under these genera.

MOTES Kohl, 1896

1867. *Notogonia* A. Costa [*nec* Perty, 1850], Ann. Mus. Zool. Univ. Napoli, IV, p. 82.
1896. *Motes* Kohl, Ann. K. K. Naturhist. Hofmus., Wien, XI, p. 351.
1900. *Caenolarra* Cameron, Ann. & Mag. Nat. Hist., (7), V, p. 28.
1900. *Leptolarra* Cameron, Ann. & Mag. Nat. Hist., (7), V, p. 29.
1900. *Spanolarra* Cameron, Ann. & Mag. Nat. Hist., (7), V, p. 32.
1901. ?*Chrysolarra* Cameron,[348] Ann. & Mag. Nat. Hist., (7), VIII, p. 118.
1911. *Notogonidea* Rohwer, Proc. Ent. Soc. Washington, XIII, p. 234.

After an examination of Cameron's types, Richards has come to the conclusion that *Leptolarra* Cameron, 1900, *Caenolarra* Cameron, 1900 and *Spanolarra* Cameron, 1900 are all congeneric with *Notogonia* A. Costa, 1867, and contends that inasmuch as Costa's name is a homonym of Perty's earlier one, Cameron's name *Leptolarra* must now be used for this genus rather than Rohwer's much later name *Notogonidea*. Richards apparently, however, has overlooked Arnold's excellent review of the genus *Notogonidea* [349] in the latter's monograph of the South African Sphecidae. Arnold after a careful study of Kohl's types of *Motes* and a careful review of the Aethiopian species of *Notogonidea*, has pointed out that of the characters upon which Kohl based *Motes*—the absence of teeth on the inner margins of the mandibles, the presence of teeth on the claws, the narrow and almost parallel sided pygidial area without apical setae, the absence of pile or pubescence on the abdomen—only the edentate inner margins of the mandibles will serve to separate the species of the *Motes*-group from *Notogonidea* proper. He therefore maintains that the retention of *Motes* as a separate genus is inadmissable and accordingly sinks it as a synonym of *Notogonidea*,[350] a view with which at present I heartily concur. Williams in 1928 [351] retained *Motes* as a separate genus intermediate between *Larra* and *Notogonidea*, listing *Leptolarra* Cameron, 1900 as a synonym of *Motes*. This author, moreover, states further

[348] Although I have seen no authentic material of this group, I believe it is quite likely that *Chrysolarra* Cameron, 1901 is congeneric with, or at most but a subgenus of *Motes*.

[349] Ann. Transvaal Mus., IX, pp. 228 et seq., (1923).

[350] It is curious that Arnold placed *Motes* Kohl, 1896 as a synonym of *Notogonidea* Rohwer, 1911. He certainly must have been aware of the fact that Kohl's name had priority over Rohwer's.

[351] Exp. Sta., Hawaiian Sugar Planters' Assn., Ent. Ser., Bull. 19, p. 69, (1928).

that ". . . these wasps present many difficulties in systematic entomology, and the genus [*i.e. Notogonidea*] may be regarded as a center around which such closely related genera as *Liris*, *Larra*, *Motes*, *Hyloliris*, *Dicranorhina* and others are grouped . . . ," an opinion with which I fully agree. I feel that when our knowledge of this very difficult group is more complete we will find Arnold's conclusions well substantiated, or if not fully so, then that *Motes* must rank at most merely as a subgenus of *Notogonidea*. However, Kohl's name being the oldest available one in the group must be used for the genus rather than Cameron's *Leptolarra*. The latter author's names, nevertheless, may be used for subgenera of such groups as warrant being accorded taxonomic rank.

In his discussion of the name *Notogonia* Costa, 1867 *nec* Perty, 1850, Richards makes the curious statement that *Tachytes nigra* Van der Linden, 1829, the species upon which Costa based his genus *Notogonia*, was not described by Van der Linden but based upon *Sphex nigra* Gmelin, 1790 [= *Sphex nigra* Fabricius, 1775 = *Sphex nigerrima* Scopoli, 1763 = *Pompilus nigerrimus* (Scopoli)] in spite of the fact that Van der Linden expressly states [352] that he doubts the specimens which he has before him, and which he describes as *Tachytes nigra*, are the same as the *Larra nigra* of Latreille [= *Sphex nigra* Gmelin, 1790]. Although it may not have been Van der Linden's intention to describe this as a new species, he nevertheless apparently succeeded in doing so. Moreover, the specific name *nigra* never having been applied, so far as I am able to determine, to a species of *Tachytes* prior to 1829 when Van der Linden described *Tachytes nigra*, this name must be used for the genotype of *Notogonia* Costa, 1867 and *Notogonidea* Rohwer, 1911. The fact that *Larra pompiliformis* Panzer, 1808 *nec* Panzer, 1805 [353] and *Tachytes nigra* Van der Linden, 1829 may ultimately

[352] Van der Linden states (1829, Nouv. Mem. Acad. R. Sci. Bruxelles, v, no. 3, p. 25) ". . . La simple indication de Latreille, rend cette synonymie très-douteuse, peut-être même doit-elle etre entièrement supprimée; car, comme il ne l'a citée dan aucun de ses ouvrages subséquens, on peut croire qu'il n'avait désigné sous ce nom qu'un Pompilus. "Quoiqu'il en soit, je vais donner la description de l'espèce que j'ai sous les yeux, et qui appartient bien certainement à ce genre [*i.e. Tachytes*]. . . ."

[353] Van der Linden knew of *Larra pompiliformis* Panzer, 1808 *nec* Panzer, 1805; he recorded it (1829, Nouv. Mem. Acad. R. Sci. Bruxelles, v, no. 3, p. 26) tentatively as a synonym of *Tachytes nitida* (Spinola) [= *Tachysphex nitida* (Spinola)], the species immediately following *Tachytes nigra* Van der Linden, appending, however, the remark that Panzer's species might not be different from *Tachytes nigra*.

prove to be the same species will not affect matters in the slightest, for Panzer's name is a homonym in any case. This latter fact cannot be settled satisfactorily until Panzer's type, apparently in the Sturm collection at Munich, and Van der Linden's material which may be either in Bruxelles or Berlin, have been examined. Were we to accept Richards' statement that *Tachytes nigra* Van der Linden, 1829 is the same as *Sphex nigerrima* Scopoli, 1763, then it would be necessary to list *Notogonia* Costa, 1867 *nec* Perty, 1850 and *Notogonidea* Rohwer, 1911 as synonyms of *Pompilus* Fabricius, 1798. However, I fail to find that Richards has recognized this cardinal point.

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